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Psychological Abstracts

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EDITORIAL NOTE

Attention is called to a minor change in classification in this issue. Sensory defects, particularly blindness and deafness, have been brought together in a new subsection under "Behavior deviations." Such abstracts have usually been classed in "Receptive and perceptual processes" in the past.

* * *

The title of *Compass*, one of our exchange journals, has been changed to *Social Work Journal* (*Soc. Wk J.*) beginning with Volume 29, Number 1, January 1948.

* * *

Erratum. The place name included as part of the title of the *Archives of Neurology and Psychiatry* should be Chicago instead of London. This error should be corrected in the title and abbreviation in the list of journals on page 559 of Volume 21.

GENERAL

1917. Kattsoff, L. O. (*U. North Carolina, Chapel Hill*.) **Observation and interpretation in science.** *Phil. Rev.*, N. Y., 1947, 56, 682-689.—The paper seeks to emphasize 4 propositions, stated by the author as follows: (1) Sense-data are not facts. (Hence naïve empiricism and radical positivism are untenable positions.) (2) Facts are the result of the interpretation of sense data by means of a categorical system which is a priori. (Hence rationalism alone is insufficient to give us facts.) As a sort of corollary to (2) we have: (3) Every scientific observation presupposes a set of categories a priori. (A science, therefore, is a consistent system of facts.) (4) It is necessary to differentiate among events, sense data, and facts.—C. C. Cooper.

1918. Rapaport, David. (*Menninger Foundation, Topeka, Kansas*.) **Technological growth and the psychology of man.** *Psychiatry*, 1947, 10, 253-259.—Discussion is offered of the following questions: "Is technological growth advantageous or deleterious in its effect on the psychology of man? Can technological growth be so organized and directed as to avoid its deleterious effects on human nature and foster its advantageous ones? Or will it be necessary to call a halt to technological progress in order to safeguard a stable equilibrium of the psychology of man? Within the social structure in which we live, what can be done about the advantageous or deleterious features of technological growth or about technological growth at large?" From his discussion the author concludes that a society with stable ideals as a substantial basis for education will be able to absorb and utilize in the furtherance of human happiness even

the most rapid technological progress.—M. H. Erickson.

1919. Smith, G. Milton. (*City College, New York*.) **Workbook and manual in psychology.** (3rd ed.) New York: Holt, 1947. vii, 213 p. \$1.40.—The 3rd edition of this workbook has been enlarged by the inclusion of classroom demonstrations requiring no special apparatus, of descriptions and questions on 19 instructional films, and the addition of illustrations from popular everyday sources. The arrangement of material follows Marquis and Woodworth's text (14: 4865).—C. M. Louttit.

THEORY & SYSTEMS

1920. Belaval, Yvon. **Remarques sur le verbalisme.** (Comments on verbalism.) *J. Psychol. norm. path.*, 1947, 40, 232-245.—Philosophical verbalism is a "failure to create in the realm of values." The philosopher cannot resist imitating the dialectic of the factual disciplines, but in the very attempt to provide rigorous proofs of his values the values themselves slip away since they are not of the order of verifiable facts. The inevitable result is disagreement on the merits of the argument in opposing philosophical camps and mutual charges of verbalism.—M. Sheehan.

1921. De Groot, Jeanne Lampl. **On the development of the ego and super-ego.** *Int. J. Psycho-Anal.*, 1947, 28, 7-11.—The id is present with the beginning of life. The ego begins development at birth, and in its development by reality contact, the following functions arise: perception, the building up of memory, reality testing, the mastering of motility, and finally, the synthetic function. The super-ego only arises after some years, and then as an heir of the oedipus complex. The individual's capacity to imitate others permits the development of identification mechanisms of paramount importance for the building of the super-ego. However, the capacity to turn aggression to the self is essential to the development of a punishing super-ego.—M. H. Erickson.

1922. de Ruggiero, Guido. (*U. Rome, Italy*.) **Existentialism; disintegration of man's soul.** New York: Social Sciences Publishers, 1948. 96 p. \$2.50.—One of the best known Italian philosophers presents the main tenets and historical ancestors of Existentialism, ending up with a critical evaluation. The philosophies of Kierkegaard, Heidegger, Jaspers, and Marcel are discussed in greater detail. Existentialism showed interesting and promising beginnings but it soon became a doctrine "far beneath that idealism against which it has aimed its blows." One of the illusions of Existentialism is to conceive of a becoming without a subject. It lacks understanding of reason, the greatest creator of human

values, and it sees life as a process deprived of any significance and value. A long introduction by Rayner Heppenstall is added.—*F. Heider.*

1923. Kostyleff, N. *La réflexologie et les essais d'une psychologie structurale.* (Reflexology and structural Psychology.) Neuchâtel: Delachaux & Niestlé, 1947. 262 p. 8 Swiss fr.—In the present book, Bekhterev's *General principles of human reflexology*, accessible to the non-Russian reader only in the unsatisfactory English translation, is summarized. Kostyleff brings out the advances in reflexology, especially those due to Ukhtomski who recognized and experimentally demonstrated the mobile, dynamic character of the functional state of nervous centers, and provided new conceptual tools for a physiological interpretation of behavior. The tenets of reflexology are contrasted with various schools of "subjective" psychology: Watt, Messer, and K. Bühler of the Würzburg School; Piaget; Koffka and Köhler; and Freud and Jung.—*J. Brožek.*

1924. Novotny, Siegfried. *Betrachtungen zur Individualpsychologie.* (Essays on individual psychology.) Vienna: Verlag Wilhelm Maudrich, 1947. 63 p. New York: Grune and Stratton, 1947. \$1.20.—Aspects of basic concepts of individual psychology are discussed in 13 brief essays. Adlerian principles are expanded and re-interpreted with a view toward achieving a more dynamic orientation. Every neurosis, not organically caused, is said to be based upon self-deception. Applications of theory to therapy are cited, accompanied by brief case summaries.—*H. P. David.*

1925. Rogers, Donald W. (*Colgate U., Hamilton, N. Y.*) *Philosophic method.* *Phil. Rev., N. Y.*, 1947, 56, 656-669.—The paper outlines a philosophical program, which is followed by a statement of several tentative convictions under the influence of which the program was conceived. The philosophical program attempts to deal in 3 dimensions with the problems of the world: (1) philosophy has a logically analytical function; (2) philosophy is concerned with the critical formulation of comprehensive, empirically derived, and verifiable hypotheses; (3) philosophy should help to formulate the social ideals needed to provide empirically significant and intellectually adequate criteria and guides in social policy. The author finds 4 dominant assumptions in his own thinking: (1) considerations other than logical or empirical determine the course of philosophical inquiry; (2) his own bias is broadly empirical along the lines of George Mead's and John Dewey's; (3) the theory of language which is central to the study of philosophical problems is not a postulate but a reliable hypothesis; and (4) the truth of a proposition can fruitfully be defined as an ideal limit consisting of the totality of its realized empirical consequences.—*C. C. Cooper.*

1926. Schuhl, Pierre-Maxime. *Le thème de Gulliver et le postulat de Laplace.* (The Gulliver theme and Laplace's postulate.) *J. Psychol. norm. path.*, 1947, 40, 169-184.—The "Gulliver theme," under which are subsumed the often recurring motifs

of giants and Lilliputians, of wondrous instantaneous changes in stature, of infinite progressions, has stamped itself not only on literature, art and phantasy, but on scientific thinking as well. In biology the "preformation" doctrine incorporated the homunculus concept, and even genes and viruses lend themselves today to popular misconceptions of the same nature. In physics the notion of the atom as a miniature solar system suggests tempting but false analogies based on the now discredited Laplace "postulate" that not absolute size but proportionality determines the characteristics of the universe. Modern physics, like biology, has come to recognize that change in size may beyond certain limits carry with it an essential change in the internal molecular structure. We must beware of falling unwittingly into the errors toward which our imagination leads us and keep in mind the platonic counsel that only through reason can immaterial things be known.—*M. Sheehan.*

1927. Sullivan, Harry Stack. *Conceptions of modern psychiatry.* Washington, D. C.: William Alanson White Psychiatric Foundation, [1947]. vii, 147 p. \$2.00.—The first William Alanson White Memorial Lectures, first published in 1940 (see 14: 4632) are republished in this volume. In a new foreword the author points out certain changes in his concepts since 1940. The volume also includes Mullahy's (see 19: 3040) critique of Sullivan's theory of interpersonal relations.—*C. M. Louttit.*

1928. White, William Alanson. *Medical philosophy; from the viewpoint of a psychiatrist.* *Psychiatry*, 1947, 10, 191-210.—In this second installment of the author's monograph (see 21: 2854) Chapters VIII through XV are given. Topics discussed are language and its dualistic nature, bias and anthropomorphism, the world within and the world without, the unconscious, effects, the mind does the impossible, and reason. 11 references.—*M. H. Erickson.*

[See also abstracts 2143, 2291.]

METHODS & APPARATUS

1929. Dourgnon, J. (*Centre de Recherches Scientifiques, Industrielles et Maritimes, Marseille, France.*) *Dispositif d'étude de l'influence d'un champ périphérique variable sur la vision centrale.* (Apparatus for studying influence of variations in the brightness of the peripheral visual field on central vision). *Travail hum.*, 1946, 9, 209-211.—Description of apparatus.—*J. Brožek.*

1930. Dratz, M. (*Centre de Recherches Scientifiques, Industrielles et Maritimes, Marseille, France.*) *Appareil pour l'étude de la vision nocturne.* (Apparatus for the study of night vision). *Travail hum.*, 1946, 9, 207-208.—The apparatus was designed so as to allow independent variation of the factors which affect vision at very low illumination intensities: size and form of the test objects, brightness and the degree of contrast between the objects and the background.—*J. Brožek.*

1931. Malcolm, J. L. (U. Otago Med. Sch., Dunedin, New Zealand.) A piezo-electric unit for general physiological recording. *J. sci. Instrum.*, 1946, 23, 146-148.—An apparatus is described which utilizes the piezo-electric properties of a quartz crystal for recording changes in pressure or movement. An amplifier and cathode ray tube are employed for recording. Examples of its use are the measurement of respiratory movements, muscle contraction, heart sounds, peripheral pulse, blood pressure, dropping rates, and ballisto-cardiographs.—(Courtesy of *Biol. Abstr.*)

1932. Whitfield, I. C. (U. Aberdeen, Scotland.) An improved stimulator for use in elementary physiology classes. *J. sci. Instrum.*, 1946, 23, 232-233.—A description of a circuit for a condenser stimulator suitable for student use. Repeated stimuli or single stimuli at very short intervals are obtained through a simple make and break switch.—(Courtesy of *Biol. Abstr.*)

NEW TESTS

1933. [Anon.] Army General Classification Test. First civilian edition. Chicago: Science Research Associates, 1947.—Adult. 1 form. Pin-punch or IBM scoring. 40 (50) min. Manual. (See *J. consult. Psychol.*, 1947, 11, 339.)

1934. Bonnardel, R. (*l'École Pratique des Hautes Études, Paris.*) Le test du double labyrinthe B. 19-D. L. (Double pursuit test.) *Travail hum.*, 1946, 9, 212-218.—The subject's task is to keep a pointer centered above each of the two winding paths, charted on a rotating cylinder, by manipulating simultaneously 2 handles. The number and duration of errors serve as scores. Significant sex differences were obtained and the test was useful for the selection of mechanics and drivers.—*J. Brožek.*

1935. Bonnardel, R., Coumetou, M., Barban, R., Gervaise, R., Grosjean, M., & Migault, J. (*l'École Pratique des Hautes Études, Paris.*) Comparaison de divers groupes professionnels et scolaires au moyen d'une batterie de tests verbaux. (Comparison of different occupational and educational groups by means of a battery of verbal tests.) *Travail hum.*, 1946, 9, 2-22.—The battery consists of 8 sub-tests (synonyms, antonyms, verbal series, numerical series, problems, explanations, proverbs, questions) and contains a total of 78 items. In the process of standardization, the battery was administered to 2400 persons at different educational levels (primary, technical, and secondary) and in varied occupations, such as typists, and technical and administrative personnel. The mean score for children in the fifth grade was 8.9 points with an S.D. of 5.5 while the engineering students (mean age 22 years) scored, on the average, 62.4 points with an S.D. of 7.9. There was no difference between scores made by the Parisians and the persons from the provinces. Among students the sex differences were negligible. No systematic effort was made to characterize occupational groups in terms of the average performance and performance range.—*J. Brožek.*

1936. Brožek, Josef, Simonson, Ernst, & Keys, Ancel. (U. Minnesota, Minneapolis.) A work test for quantitative study of visual performance and fatigue. *J. appl. Psychol.*, 1947, 31, 519-532.—The authors have developed a test for the study of visual performance and fatigue. The visual task consists in the recognition of letters presented on a belt moving behind a narrow slit. Difficulty of the task is adjusted by using different letter sizes, different speeds, or different contrast. In a series of tests consisting of 200 letters presented over a 2 hour work period, the effect of varying intensities of illumination (2, 5, and 50 f. c.) was reflected in (1) higher general level of performance, (2) smaller fatigue decrement in output, and (3) smaller inter-individual variability. The authors believe that the test satisfies the following requisites of a good visual performance test: (1) well standardized work task; (2) possibility of easy quantitative evaluation; (3) clearcut relationship to fundamental visual functions; (4) elimination of auxiliary functions, such as manual skill or verbal intelligence; (5) elimination, as far as possible, of uncontrolled factors affecting performance, particularly continued training; (6) practical applicability of results; (7) possibility to vary critical factors of performance. 9 references.—*C. G. Browne.*

1937. Buswell, G. T. SRA reading record. Chicago: Science Research Associates, 1947.—High school-college. 1 form. 28 (40) min. Manual, profile chart. (See *J. consult. Psychol.*, 1947, 11, 340-341.)

1938. Cleeton, G. U., & Mason, C. W. Vocational aptitude examination, type E-A. (Rev. ed.) Bloomington, Ill.: McKnight & McKnight, 1946.—College-adult. 1 form. Tests 1-6, 56 (70) min.; 7-8, untimed, (25) min. Manual, key. (See *J. consult. Psychol.*, 1947, 11, 341.)

1939. Dvorak, Beatrice J. (U. S. Employment Service, Washington, D. C.) The new USES General Aptitude Test Battery. *J. appl. Psychol.*, 1947, 31, 372-376.—Factor analysis studies of many tests have resulted in the selection of 15 tests which comprise the General Aptitude Test Battery. They measure the following aptitudes which contribute to occupational success: G-intelligence, V-verbal ability, N-numerical ability, S-spatial ability, P-form perception, Q-clerical perception, A-aiming, T-motor speed, F-finger dexterity, and M-manual dexterity. There are 11 paper and pencil and 4 apparatus tests, requiring 2½ hours for administration. Occupational Aptitude Patterns have been established for 20 fields of work, representing 2000 occupations, setting critical scores which will eliminate the lowest third of the standard scores of the employed sample. An Individual Aptitude Profile is prepared from the counselee's scores. This is compared with the 20 Occupational Aptitude Patterns to determine the fields of work that are most suitable for the person's abilities. Thus far the use of the GATB has been limited to USES offices.—*C. G. Browne.*

1940. Farnsworth, D. **Farnsworth dichotomous test for color blindness.** New York: Psychological Corporation, 1947.—All ages. Individual test. 1 form. (2) min. Rack, color caps, score sheets, manual. (See *J. consult. Psychol.*, 1947, 11, 339-340.)

1941. Graham, F., & Kendall, B. **Memory-for-designs test.** St. Louis, Mo.: Department of Neuropsychiatry, Washington University, 1946.—Older children-adult. Individual test. 1 form. (10) min. Design cards, scoring sheets. (See *J. consult. Psychol.*, 1947, 11, 340.)

1942. McMurray, R. N., & King, J. E. **SRA non-verbal form.** Chicago: Science Research Associates, 1947.—High school-college. 1 form. Hand scoring or IBM. 10 (15) min. Manual. (See *J. consult. Psychol.*, 1947, 11, 340.)

1943. Personnel Research Section, The Adjutant General's Office. **The Army General Classification Test, with special reference to the construction and standardization of Forms Ia and Ib.** *J. educ. Psychol.*, 1947, 38, 385-420.—The Army General Classification Test, administered to more than 12,000,000 men, was the major instrument in initial classification and assignment of enlisted men and inductees during the war. This article presents in brief the facts relating to its construction, item analysis, standardization, norms and relationships to other tests. Correlation with the Otis Self-administering Test of Mental Ability and with the Wells Revised Alpha, Form 5, were .83 and .90 respectively. The distribution of AGCT standard scores, for more than nine million soldiers, was found to be negatively skewed. It is possible that the native capacities which underlie test-intelligence are normally distributed, but whereas three-fourths to four-fifths of the population continue to improve their fundamental skills as a result of education, the remainder allow these skills to degenerate after their compulsory period of education is completed.—E. B. Mallory.

1944. Seashore, H. G., & Bennett, G. K. **Stenographic proficiency test.** New York: Psychological Corporation, 1946.—Commercial H. S. graduates. 1 form. (45) min. Phonograph records, manual. (See *J. consult. Psychol.*, 1947, 11, 341.)

1945. Shneidman, Edwin S. (*U. Southern California, Los Angeles.*) **The Make-A-Picture-Story (MAPS) projective personality test: a preliminary report.** *J. consult. Psychol.*, 1947, 11, 315-325.—The aims of the MAPS test are to assist the practitioner in arriving at differential diagnoses among the major nosological categories and at understanding the individual psychodynamics in any particular patient. The latter is its primary purpose. The basic test material consists of 21 background pictures printed achromatically on thin cardboard, and 67 figures. The present test material is proposed for adolescents and adults of at least dull intelligence. Time for administration will range from 45 to 90 minutes. Data on standardization, validity, etc. will be published later.—S. G. Dulsky.

1946. Snidecor, John C. (*U. California, Santa Barbara.*), & Hanley, Theodore D. **The construction of a test of ability to repeat spoken messages.** *J. appl. Psychol.*, 1947, 31, 397-405.—The Command Memory Test was constructed for the purpose of selecting Naval personnel as battle phone talkers. Two equivalent test forms are used, each containing 33 items consisting of standard shipboard messages and commands, taken from official sources. A detailed description of the experimental procedure and statistical results, including correlations with other known variables, is given.—C. G. Browne.

1947. Thurstone, L. L., & Thurstone, T. G. **SRA primary mental abilities.** Chicago: Science Research Associates, 1947.—Ages 11-17. 1 form. 26 (44) min. Manual, profile sheet. (See *J. consult. Psychol.*, 1947, 11, 340.)

1948. Thurstone, T. G., & Thurstone, L. L. **SRA verbal form.** Chicago: Science Research Associates, 1947.—High school-college. 1 form. Hand scoring or IBM. 15 (20) min. Manual. (See *J. consult. Psychol.*, 1947, 11, 341.)

1949. Thurstone, T. G., & Thurstone, L. L. **Tests of primary mental abilities, for ages 5 and 6.** Chicago: Science Research Associates, 1946.—Ages 5-6. 1 form. (60) min., in 2 periods. Manual. (See *J. consult. Psychol.*, 1947, 11, 341.)

1950. Vaughn, K. W. **A proposed engineering aptitude test for high school students.** *J. Engng Educ.*, 1947, 38, 114-121.—An aptitude test is to be developed which will indicate to the high school sophomore the advisability of further study of mathematics and science in preparation for engineering. The projected series of tests will measure 3 major abilities: ability to comprehend and interpret scientific materials, general mathematical ability, and ability to comprehend mechanical principles.—G. S. Speer.

1951. Wechsler, D. **Wechsler-Bellevue intelligence Scale, Form II.** New York: Psychological Corporation, 1946.—Adolescent-adult. Individual test. (Second form.) (75) min. Materials, manual, record blank. (See *J. consult. Psychol.*, 1947, 11, 342.)

1952. Wesman, A. G. **Personnel classification test.** New York: Psychological Corporation, 1947.—High school, college, adult. 1 form. 28 (33) min. Manual, key. (See *J. consult. Psychol.*, 1947, 11, 340.)

[See also abstracts 2076, 2279, 2332, 2345.]

STATISTICS

1953. Ayyangar, A. A. Krishnaswami. (*Mysore U., Mysore, India.*) **On 'statistical inference'.** *Half-yrly J. Mysore Univ., Sect. A.*, 1946, 8, 23-32.—This paper reviews the ideas on statistical inference by Pearson, Fisher, Wald, and Scheffe.—(Courtesy of *Biol. Abstr.*)

1954. Buros, Oscar Krisen. (*Rutgers U., New Brunswick, N. J.*) **Statistical methodology index,**

No. 9. *J. Amer. statist. Ass.*, 1947, 42, 491-496.—The ninth in a series of bibliographic indices concerning statistical methodology literature published in 1945 to date.—*J. W. Degan.*

1955. Coum  t  , M. (*Laboratoire de Psychologie appliqu  e des Hautes   tudes, Paris.*) Calcul abr  g   de l'  cart moyen d'une distribution de valeurs. (Short-cut in calculating average deviation from the median of a distribution.) *Travail hum.*, 1946, 9, 201-204.—Description of the method.—*J. Bro  ek.*

1956. Deemer, Walter L., Jr. (*Air U., Sch. Aviat. Med., Randolph Field, Tex.*) The power of the *t* test and the estimation of required sample size. *J. educ. Psychol.*, 1947, 38, 329-342.—"The 'power' of a statistical test is defined as the probability of rejecting the null hypothesis." The author discusses this concept and develops a formula for use in determining the sample size required to achieve the desired power. There are instances in which the null hypothesis may be accepted falsely if the importance of sample size is not appreciated or its relationship to 'power' is not known.—*E. B. Mallory.*

1957. Garc  a Perez, Andres. (*U. Nacional de M  xico.*) Elementos de m  todo estad  stico. (Elements of statistical method.) M  xico City, M  x.: Imprenta Universitaria, 1945. xvii, 284 p.—An introduction tracing briefly the history of statistical methods, with special reference to population studies, and with progressive definition of statistics, precedes 6 chapters of content material: Definition, Statistical phenomena, Statistical Proportions and Index Numbers, Measures of Dispersion, Measures of Relation, Graphical presentation. Tables of powers, Tables of Logarithms. Many general and special purpose tables, charts, graphs, and practical examples.—*A. L. Moseley.*

1958. Goodenough, Florence L. (*U. Minnesota, Minneapolis.*) Note on an unnecessary source of confusion in statistical terminology. *J. educ. Psychol.*, 1947, 38, 443-445.—It is urged that variability within a single measured sample be always designated by the symbol SD, and that the estimated variability of a given statistic within an infinite series of samples of the same universe be designated by the symbol σ , with subscript to indicate the particular statistic under consideration. This would eliminate much unnecessary confusion for students and occasionally even for investigators with more advanced training.—*E. B. Mallory.*

1959. Holley, J. W. (*U. Southern Calif.*) A note on the reflection of signs in the extraction of centroid factors. *Psychometrika*, 1947, 12, 263-265.—This note suggests that the reflection of residuals in the centroid method of factor analysis should be continued, whenever possible, after all the sums of the columns in the correlation matrix, excluding diagonal values, are positive. A criterion is given for determining whether further reflection is possible in such cases.—(Courtesy of *Psychometrika*.)

1960. Holzinger, Karl J. (*U. Chicago, Ill.*) Factoring factors. *J. educ. Psychol.*, 1947, 38, 321-328.—Either orthogonal or oblique solutions, in

factor analysis, are statistically and psychologically useful in interpreting test data, but successive factoring to discover higher order factors does not yield anything of new psychological significance. An example is presented in full to demonstrate the statistical implications of higher order factoring.—*E. B. Mallory.*

1961. Kosambi, D. D. An extension of the least-squares method for statistical estimation. *Ann. Eugen., Camb.*, 1947, 13, 257-261.—The problem of blood-gene ratio determination in individuals suffering from cancer and normals is examined as an example for the application of an extension of the least-squares method of statistical estimation. The extension involves introduction of the concept of distance, the method of least-square sum of distances, and the use of Lagrange's multipliers. Equations are given.—*S. Wapner.*

1962. Laderman, Jack, & Abramowitz, Milton. Applications of machines to differencing of tables. *J. Amer. statist. Ass.*, 1946, 41, 233-237.—This paper is concerned with the way in which the important problem of finding differences for tabular entries can be handled by the Underwood-Elliott Fisher Sunstrand Accounting Machine, Model D. All differences up to the 8th of 12 digit entries can be simultaneously calculated and printed. A binomial method for easy calculation of the *n*'th difference is mentioned. This would be useful to those who have access only to ordinary machines.—(Courtesy of *Biol. Abstr.*)

1963. Lichte, William H. (*U. Missouri, Columbia.*) A method and tables for obtaining standard errors of differences between proportions when N_1 is equal to N_2 . *J. appl. Psychol.*, 1947, 31, 449-456.—A method is presented for computing standard errors of differences between proportions where the 2 groups are of equal size. The mathematical basis of the method, the construction of the tables given, the use of the tables to obtain $\sigma_{p_1 - p_2}$, and an estimate of the amount of error involved in the use of the tables are given. Two tables are included: (1) values of $\sqrt{p_1q_1 + p_2q_2}$ for given values of p_1 and p_2 ; (2) standard errors for given values of $\sqrt{p_1q_1 + p_2q_2}$ and N .—*C. G. Browne.*

1964. Penrose, L. S. Some notes on discrimination. *Ann. Eugen., Camb.*, 1947, 13, 228-237.—A method is described for discriminating two classes of objects or people which differ with respect to a large number of characters. The number of characters is reduced to 2 by using the compound measurements "size" and "shape." By "size" is meant the sum of a set of equally weighted measurements, preferably expressed in terms of their standard deviations. By "shape" is meant the sum of a set of measurements, preferably expressed in standard units, which are weighted before summation so that the sum of the weights themselves is zero. The value of these compound measurements lies in the fact that if the characters are equally intercorrelated, size is uncorrelated with shape. The way in which differences in variances between two populations can contri-

bute to discrimination is indicated. When the variances of the distributions of measurements of one character differ in 2 populations, the degree of discrimination can be maximized by taking the squares of measurements from a specified point on the scale. The usefulness of the size and shape method is shown by reworking of some material used by Fisher to discriminate two species of Iris.—S. Wapner.

1965. Schilling, Walter. (Stanford U. Sch. Med., San Francisco, Calif.) A frequency distribution represented as the sum of two Poisson distributions. *J. Amer. statist. Ass.*, 1947, 42, 407-424.—"Certain frequency distributions which resemble a Poisson distribution, but not quite closely enough, may sometimes be better represented as the sum of two Poissons. A method for the dichotomy and subsequent summation is described, and twenty-nine distributions to which the Poisson was supposedly a good fit, are analyzed."—J. W. Degan.

1966. Smith, Cedric A. B. Some examples of discrimination. *Ann. Eugen., Camb.*, 1947, 13, 272-282.—The question of discrimination between two populations is examined, and the best discriminant function is indicated as the difference between the logarithms of the 2 distribution functions. This gives a quadratic function for discrimination between two normal distributions. The equations for this function are given. It is indicated that in special cases this takes a simple form, e.g., Fisher's linear discriminant is obtained when the variances and covariances are the same in the two distributions. The useful combination of this theory with Penrose's theory (see 22: 1964) of "size" and "shape" is noted. Examples of the application of the theory to experiments on a normal-psychotic test, and an intelligence test are given. In the examples the "size" and "shape" values have already been calculated, and the linear discriminants have been worked out for comparison with the quadratic ones.—S. Wapner.

1967. Waugh, F. V. The computation of partial correlation coefficients. *J. Amer. statist. Ass.*, 1946, 41, 543-546.—Given that the partial regression of x_1 on x_2 is b_{12} and its standard error is S , the partial correlation coefficient, r_{12} , is: $r_{12} = \frac{b_{12}}{\sqrt{b_{12}^2 + N' S^2}}$ where N' is the number of degrees of freedom. Examples from Ezekiel's text show that this method of computation saves much labor as compared with the "Doolittle method." The above formula is derived.—(Courtesy of *Biol. Abstr.*)

[See also abstracts 2148, 2149, 2378].

ORGANIZATIONS

1968. Educational Testing Service. Establishment of the Educational Testing Service. New York: Educational Testing Service, 1947. 10 p.—Describes the work and objectives of this Service which was formed by the combination of the testing services of the American Council on Education, the College Entrance Examination Board, and the

Carnegie Foundation for the Advancement of Teaching.—C. M. Louttit.

1969. Hamilton, Samuel W. Presidential address; our association in a time of unsettlement. *Amer. J. Psychiat.*, 1947, 104, 1-12.—The past, present and future work of the American Psychiatric Association is discussed. Of especial importance are the standards to be reached and maintained in the operation of mental hospitals. Dr. Hamilton characterizes as the Association's most important goal, better treatment for patients who are mentally ill. He points out that, in addition to the physician, collaborators in nursing, psychology and other skills must center their attentions on the welfare of the patient.—R. D. Weitz.

HISTORY & BIOGRAPHY

1970. Anokhine, P. L'attività della Scuola di I. Pavlov nel decennio della morte. (The production of the Pavlov School in the first ten years after his death.) *Arch. Psicol. Neurol. Psychiat.*, 1947, 8, 49-57.—In the first 10 years after the death of I. Pavlov his school developed and applied some of its more vital ideas in the field of physiological research on the nervous system and in the clinical field. Research was continued on the influence of nervous control on trophic condition of organs and tissues on nervous regulation of gastric and other organ functions; on the study of reflexes and the influence of frontal lobotomy in the organization of spontaneous behavior; on the influence of sensorial stimulations on other internal organs according to the principles of the conditioned reflex; etc. The work of these 10 years is reviewed.—R. Calabresi.

1971. Baumgarten-Tramer, Franziska. Dagmar Weinberg. *Arch. Psicol. Neurol. Psychiat.*, 1947, 8, 69-70.—Obituary.

1972. Bonnardel, R. (l'École Pratique des Hautes Études, Paris.) La position actuelle de la psychotechnique en France. (Present situation of the psychotechnics in France.) *Travail hum.*, 1946, 9, 171-177.—Interest in the use of psychometric procedures in vocational guidance and occupational selection is very lively. The author discusses the dangers of a dogmatic tendency characteristic of some of the users of psychological tests who have a blind face into their ware. The experimentalist can never be satisfied with aprioristic postulates and the speculations of literary psychology; he must test his hypotheses and establish empirically the degree of relationship between measured psychological characteristics and the criteria of "success." Applied psychology has only few definitive answers; it can teach primarily the methods by which to attack problems, not to dish out a foolproof doctrine and procedures. The current vogue of "tests" in France, markedly delayed in comparison with some other countries, may interfere rather than promote a sound development of psychometry.—J. Brožek.

1973. Brightman, Edgar Sheffield. (Boston U., Boston, Mass.) Philosophy in the United States 1939-1945. *Phil. Rev.*, N. Y., 1947, 56, 390-405.—

The author covers in detail the effects of the war on philosophers and on philosophy in colleges and universities, the activities during the war of the American Philosophical Association and other societies, war-time philosophical journals, old and new, and the progress of research and publication during the war period. From the outbreak of the conflict in Europe, the attention and the sympathies of philosophers were deeply involved; reflection on the social and political values at stake, the meaning and right of democracy, the importance of truth and reason over against racial, instinctive, and irrational drives was deepened. "The Library of Living Philosophers" is widely regarded as the most important project of philosophical scholarship during the war years. During this period the most active publication was concentrated in the field of social philosophy. By far the most important contribution to an understanding of the place of philosophy in liberal education has been made by the Commission on the Function of Philosophy in American Education. American philosophers, on the whole, see it as their chief present task to understand persons and their social relations, environment, and development, in the light of the best available insights.—C. C. Cooper.

1974. Brill, A. A. Samuel W. Hamilton: president 1946-1947; a psychiatric profile. *Amer. J. Psychiat.*, 1947, 104, 13-15.—R. D. Weitz.

1975. E. B. Pierre Janet. *Arch. Psicol. Neurol. Psychiat.*, 1947, 8, 66-68.—Obituary.

1976. Fisch, Max H. (*U. Illinois, Urbana*.) *Evolution in American philosophy*. *Phil. Rev.*, N. Y., 1947, 56, 357-373.—The author states that a complete sketch of the fortunes of the idea of evolution in America would include the early opposition from the side of religion, the irenic work of religious-minded biologists like Gray, the reconciliations of evolution and religion, the theologies of evolution which sought to make religious capital of it, the American forms of social Darwinism, the cosmic philosophies of Fiske and Abbot, the rise of the distinctively American science of sociology, the attempts of idealists like Howison to fix the limits of evolution and of others like Royce to digest evolution and entropy together in the Absolute, the genetic social philosophies of Baldwin, Mead, and others, and the emergence of those forms of evolutionary naturalism that are still current. The early steps in the legitimate line of descent, not from Spencer but from Darwin, in American philosophy are traced in detail, including the views of Peirce, Wright, Holmes, James, and Dewey.—C. C. Cooper.

1977. Laugier, H. J.-M. Lahy (1872-1943). *Travail hum.*, 1946, 9, 1.—Obituary.

1978. Matthiessen, F. O. (*Harvard U., Cambridge, Mass.*) *The James family; including selections from the writings of Henry James, Senior, William, Henry & Alice James*. New York: Knopf, 1947. xvi, 706 p. \$6.75.—Since this volume constitutes the biography of a family of writers the author offers in addition to life sketches of the James family a comprehensive anthology. Besides

numerous letters the book is replete with excerpts of the writings of William James, Sr., and his children, William, Henry, and Alice. The material is divided into seven books and an epilogue. Book One is devoted to Henry James, Sr., and contains his fragmentary Autobiography, some Letters to Emerson, and selections from his sociological writings under the headings: Socialism and Civilization, The Social Significance of our Institutions. Several of the books offer analyses of and excerpts from the philosophical and psychological writings of William James, with special emphasis upon: The Emotions, The Will to Believe, Does Consciousness Exist? The Moral Equivalent of War, The Varieties of Religious Experience, and others. Of Henry James' writings the author features, aside from letters, a number of essays, outstanding among them: The Art of Fiction, The Science of Criticism, and critical views concerning Emerson, Whitman, Turgeneff, Balzac, Flaubert, and others. In the epilogue the brothers William and Henry are compared, not only on the basis of their traits and literary productions, but as they appear to others, especially writers and critics.—J. R. Kantor.

1979. Murphy, Arthur E. (*Cornell U., Ithaca, N. Y.*) *Ideals and ideologies: 1917-1947*. *Phil. Rev.* N. Y., 1947, 56, 374-389.—The author analyzes opinion and habits of thought in American philosophy since 1917 concerning the nature, function, and validity of the ideals by reference to which men normally explain or justify their conduct. In the philosophical developments of the period between 1880 and 1917, the process by which, in a progressive society, men reasonably change their minds, even about the most cherished of their traditional ideals, was held to provide also the progressive confirmation and realization of those ideals. This basic assumption of a "liberal" society found notable expression in the writings of Royce, Dewey, and Peirce. A progressive philosophy became an anachronism in the face of the actual course of events following 1917. In contrast to the period preceding the first World War, philosophical ideas during the last quarter-century have lost their status as reasons with a social function, and have been interpreted instead as toys (or "visions" or "bright pictures"), as tools, and more recently as weapons in a worldwide struggle for power. The rediscovery of the efficacy and "social reality" of ideals as ideologies was an event of major philosophical importance, involving the recognition that the ideals or "myths" that define the consensus of belief and valuation within any society may make a decisive difference in its social behavior. Today we may again make sense of philosophic ideas as reasons, but only in the context of a free society.—C. C. Cooper.

1980. Orgler, Hertha. *Alfred Adler; the man and his work. Triumph over the inferiority complex*. (2nd ed.) Ashington, Rochford, Essex, Eng.: C. W. Daniel, 1948. 240 p. 15s.—A summary of the major tenets of Adler's Individual Psychology is presented non-critically. Brief descriptions of

Adler's personality in professional and personal relationships taken largely from the author's first hand experience are included. The author relates Adler's personality to the growth and development of his point of view. Special stress is placed on Adler's humanitarian feelings and their relationship to his concept of social interest and his therapeutic techniques. The application and dissemination of individual psychology principles in several disciplines and in a variety of countries is described. 33 references, (see 15: 1160).—J. B. Rotter.

1981. Payne, Sylvia M. Ella Freeman Sharpe; an appreciation. *Int. J. Psycho-Anal.*, 1947, 28, 54-56.—Obituary.

1982. Schneider, Herbert W. (Columbia U., New York.) A century of romantic imagination in America. *Phil. Rev.*, N. Y., 1947, 56, 351-356.—The author describes three "realms of philosophic imagination," which he characterizes as (1) romantic social philosophy and philosophy of history (millenarian apocalypticism), (2) romantic psychological empiricism ("subliminalism"), and (3) romantic metaphysics ("unrealism"). The apocalyptic hope took on philosophical seriousness and concrete political form by the late 1850's. In its positive aspects this faith found expression in the social gospel and in emergent evolutionism. The exploration of the sub- and superconscious, expressed religiously as spiritualism, developed the theory that there is inherent in human nature a specific spiritual or religious element, faculty, instinct, or emotion. This theory was supplemented by the psychology of religious conversion. Closely related was the genetic psychology of adolescence, which developed the cultural recapitulation hypothesis. These and other interests, including Schopenhauer's romantic voluntarism and the Spencerian doctrine that the unknowable has empirical validity and functions, were brought together in the psychology of William James. The work of unrealism began with metaphysical individualism. Individualistic idealism gradually took root, followed by the doctrines of absolute idealism, culminating in the formulation of Josiah Royce.—C. C. Cooper.

[See also abstracts 2291, 2292.]

PROFESSIONAL PROBLEMS OF PSYCHOLOGY

1983. [Anon.] Stipends for graduate students in psychology and related fields, 1948-49. *Amer. Psychologist*, 1948, 3, 20-29.

1984. Bell, Hugh M. (Chico State Coll., Chico, Calif.) Analysis of summer courses for counselors. *Occupations*, 1948, 26, 240-244.—An analysis of course offerings indicates that graduate training facilities in guidance and counseling tend to be concentrated in the North Central and Middle Atlantic areas of the United States. Excellent graduate programs are offered in some institutions, and quite inadequate programs in other institutions, although the same degrees are awarded. Only one-third of the instructors of these courses belong to any of the

national professional guidance organizations.—G. S. Speer.

1985. Cooke, Mary. Opportunities for psychologists, psychiatrists, psychiatric social workers; an occupational brief. Pasadena, Calif.: Western Personnel Institute, 1948. 38 p. \$1.00.—The profession of psychology is considered from the point of view of occupational description and includes a discussion of training, professional status, job opportunities, and salary. Recent activities of the American Psychological Association in this field are included. Similar job analysis materials are given for psychiatrists and psychiatric social workers. In all three fields there are suggested reading references.—C. M. Louttit.

1986. Leuba, Clarence, & Federighi, Henry. (Antioch Coll., Yellow Springs, O.) A course in the life sciences. *Amer. Psychologist*, 1948, 3, 30-34.—This course being given at Antioch College is developed on the basis of several previously required courses in anthropology, biology and health, and one elective course in sociology. The general objective of the course is to present a comprehensive view of man in relation to other living things and to give the individual student an insight into his own position. Great care has been exercised to avoid the lack of unity and cohesiveness which characterizes some forms of survey courses. The course extends over 2 years. It was developed by the authors, and the instruction is mainly by these same 2 individuals. The authors discuss the objectives, content, conduct, and difficulties of the course. There is also given an outline of the course.—L. J. Timm.

1987. McQuitty, Louis L. (U. Illinois, Urbana.) Developing applied psychologists. *Amer. Psychologist*, 1948, 3, 16-19.—One reason military psychologists contributed as much as they did was that they were required by tradition to have an understanding of military affairs. It appears that if applied psychologists were more familiar with the non-psychological aspects of their particular areas of application, they would be able to make greater contributions. It is suggested that applied psychologists be educated jointly in some well established commercial or industrial occupation and in psychology.—L. J. Timm.

1988. Murphy, Gardner. Psychology serving society. *Surv. Graph.*, 1948, 37, 12-15.—The experiences of psychologists during World War II, based on developments in the science during the pre-war years, has given the profession greater confidence in the value of its contributions toward the solution of many social problems. In industry, education, domestic and international social problems, and in problems of personal adjustment the newer emphasis on the total personality in its cultural setting is making valuable many different kinds of psychological application. The author summarizes historical antecedents and points out the nature of current activities of psychologists in dealing with socially important problems.—C. M. Louttit.

1989. Panken, Jacob. Dealing with juvenile delinquency: science can be expressed in simple language. *Nerv. Child*, 1947, 6, 392-398.—After referring briefly to professional publications dealing with technical concepts, the author urges that psychologists and psychiatrists write for the people who are to be benefited by what they have to say.—G. S. Speer.

1990. Sharpe, Ella. The psycho-analyst. *Int. J. Psycho-Anal.*, 1947, 28, 1-6.—The essential and desirable qualifications for a student who wishes to become a psycho-analyst are implicit in the nature of psycho-analytic work. Intelligence, academic background, or a standard of culture the equivalent of such qualifications is the initial equipment. An insatiable curiosity concerning man's mental and emotional life is another essential qualification. To this must be added a good capacity of self knowledge. There follows then a general discussion of personality needs, training procedures, and the problems that must be met in the practice of psychoanalysis.—M. H. Erickson.

[See also abstracts 2333, 2367.]

PHYSIOLOGICAL PSYCHOLOGY

1991. Adolph, Edward F. (U. Rochester, N. Y.) Urges to eat and drink in rats. *Amer. J. Physiol.*, 1947, 151, 110-125.—In albino rats maintained upon diets mixed with kaolin, cellulose, or water, while the quantities of material ingested exceeded a control period (roughage up to 8% and water up to 125% of body weight) the amounts of nutrients did not. Variations in flavoring or nutrients failed to increase roughage ingestion. Limited food or water privation decreased consumption of the unlimited one. Following complete deprivation of food, water or both for from 1 to 6 days body weight was gradually restored by consuming very small excesses. The patterns of ingestion to excretion show effects of interrelationship of several factors, excretory capacity, water to food intake, and ingestion to roughage-handling capacity.—R. B. Bromiley.

1992. Beach, Frank A. (Yale U., New Haven, Conn.) Hormones and behavior; a survey of interrelationships between endocrine secretions and patterns of overt response. New York: Paul B. Hoeber, 1948. xiv, 368 p. \$6.50.—The volume presents "a summary of existing knowledge . . . a compendium of what others have done and have concluded." The first 10 chapters systematically review experimental and, upon occasion, clinical studies pertaining to hormonal effects upon the following: Courtship, mating, sex reversals, parental behavior, migration, aggression, emotionality, learning, motor activity, metabolism, homeostasis, moulting, and the growth of primary and secondary sex characters. Chapter 11 studies the influence of external factors (such as light and temperature) upon endocrine activity. Chapter 12 reviews the ontogenesis of certain glands and relates in fact and theory these data to the roles of the hormones in the maturation

tion of behavior mechanisms. Chapter 13 discusses the influence of age, sex, genetic strain, and other factors upon behavioral variability as affected by hormones. Chapter 14 presents a review of the theories offered to explain the mechanisms by which the endocrines exert their effects and presents an hypothesis based upon the author's evolutionary approach to the problem. 65-page bibliography; an 8-page glossary.—L. A. Pennington.

1993. Burt, Cyril, & Banks, Charlotte. A factor analysis of body measurements for British adult males. *Ann. Eugen., Camb.*, 1947, 13, 238-256.—Factor analysis was applied to correlations between 9 physical traits obtained from 2400 male volunteers for flying duties in the Royal Air Force, aged 17-38. The factor saturations were calculated separately for 8 age groups, and the factor patterns were found to be virtually the same in each case. Averaged correlations were computed and conclusions based on pooled results. The proportionate amounts contributed by the 6 extracted factors to the total variance was approximately 55, 13, 10, 4, 2, and 1%. These are similar to the proportions found by Burt in factorizing mental tests. The most striking factor is the first or "general factor" (55%) which is interpreted as a factor for general body size. The second factor is a bipolar factor (13%) which classifies traits into (1) longitudinal, and (2) transverse or circumferential. If the term "type" is interpreted as meaning a patterned tendency, the traditional distinction between leptosomic and pachysomic types of body build is confirmed. This bipolar tendency is measured by means of a partial regression equation. The distribution of factor measurements, calculated for 805 air force cadets 20 years of age, shows a close approximation to the normal curve. 27 references.—S. Wapner.

1994. Fisher, M. Bruce, & Birren, James E. (Fresno State Coll., Calif.) Age and strength. *J. appl. Psychol.*, 1947, 31, 490-497.—Using a Smedley hand dynamometer, muscular strength of 552 male industrial manual workers was measured. Results indicate that muscular strength shows an increase to the late twenties and a decline at an increasing rate from that age upward. Explanations of the findings, and the results of previous similar studies are given. 18 references.—C. G. Browne.

1995. Fuller, John L. (U. Maine, Orono.) Activity, heart rate, and pneumograms of normal dogs during excitement. *Anat. Rec.*, 1946, 96, 94-95.—Studies on some physiological response to excitation in 34 adult dogs show variations in the pattern with different stimuli, such as presence of a person friendly to the dog, a person who threatened, loud bell ringing in the dark, and presence of another dog. 4 major types of response patterns appeared: (1) An impassive type showing little external or internal response; (2) repressed type showing slight external response but increased heart rate and irregular respiration; (3) nervous type with marked internal response and visible trembling becoming convulsive in extreme cases; (4) excited type with rapid breath-

ing and only moderate heart increases. Preliminary observations on responses to a moving picture indicated that fox terriers responded intelligently to the film, while springer spaniels did not appear to comprehend the pictures and did not watch them.—(Rewritten: courtesy of *Biol. Abstr.*)

1996. Guyton, Arthur C. (Warm Springs, Ga.) **Analysis of respiratory patterns in laboratory animals.** *Amer. J. Physiol.*, 1947, 150, 78-83.—Analysis of the respiratory patterns of 9 species including mouse and man recorded by means of an oscilloscopic respirographic method (see 22: 1997) reveals little variation between species other than rate and tidal air. Formulae for predicting, on the basis of weight, of tidal air, respiratory rate, inspiratory and expiratory rate of flow etc. are given.—R. B. Bromiley.

1997. Guyton, Arthur C. (Warm Springs, Ga.) **Measurement of the respiratory volume of laboratory animals.** *Amer. J. Physiol.*, 1947, 150, 70-78.—An oscilloscopic respirograph and other methods of measuring respiratory volume are described. The formula Resp. Vol. per Min. in cc. = $2.10 \times (\text{wt. in grams})^{\frac{1}{4}}$ is derived from data on 428 resting animals of 8 species including mouse and man.—R. B. Bromiley.

1998. Hambley, Wilfrid D. (Chicago (Ill.) Natural History Museum.) **Cranial capacities, a study in methods.** *Fieldiana: Anthropology*, 1947, 36(3), 25-75. (Chicago Natural History Museum 75¢)—The literature on methods of measuring cranial capacities, both directly and as computed from cranial diameters, is reviewed. The author considers Isserlis' formula to be the most accurate for general use. Skulls of certain groups require some correction. In a summary table the cranial capacities of males of various groups are listed, ranging from Tasmanians with a capacity of 1256 cc. to Europeans with a capacity of 1488 cc. 201-item bibliography.—C. M. Louttit.

1999. Larsen, Eleanor M. (U. Wisconsin Med. Sch., Madison.) **The fatigue of standing.** *Amer. J. Physiol.*, 1947, 150, 109-121.—In young women the effect upon the height of the center of gravity of continued standing and of static effort are reported, as are the effects of static effort upon the mean location of magnitude of center of gravity oscillations during normal standing. These data show a lowering of the center of gravity and changes in mean location and of balance oscillations probably of circulatory origin.—R. B. Bromiley.

2000. Siegel, Paul S., Alexander, Irving E., & Stuckey, Helen L. (U. Alabama, Tuscaloosa.) **The change in specific gravity of the blood plasma of the rat during severe water privation.** *Amer. J. Physiol.*, 1947, 150, 729-732.—Blood plasma samples of rats show a significant increase in mean specific gravity following 48 hours of water deprivation.—R. B. Bromiley.

2001. Van Castricum, M. **Age of menarche on the Witwatersrand, South Africa.** *S. Afr. med. J.*, 1946,

20, 594.—An extract was made of case histories of European women attending the Out-patient Department of the Johannesburg General Hospital during the period 1930 to 1938. Of these, 2233 had a record of age of the onset of menstruation. The mean age of the menarche was 14.65, range 9 to 21 years, S.D. 1.79 years.—(Courtesy of *Child Developm. Abstr.*)

2002. Weinland, James D. (New York U., New York.) **A five month strength curve.** *J. appl. Psychol.*, 1947, 31, 498-501.—The author tested his strength on a Smedley hand-dynamometer every day for 5 months. Although there are day to day variations, results show a continuing increase in strength, supporting the Hersey variability theory.—C. G. Browne.

[See also abstracts 1931, 1932, 2034.]

NERVOUS SYSTEM

2003. Arvanitaki, A. **Interactions électriques entre deux cellules nerveuses contigües.** (Electrical interactions between two contiguous nerve cells.) *Arch. int. Physiol.*, 1942, 52, 381-407.—In the visceral ganglion of *Aplysia* large cells are isolatable whose electrical activity can be registered by picking it up with micro-electrodes. In examining two contiguous cells, the author has succeeded in analysing the "ephaptic" interactions: the activation of a cell entrains responses in the neighboring cell, and even releases at times its auto-rhythmic activity. When two neighboring cells have a rhythmic activity of different periodicity, they do not delay in synchronizing. Inversely, an inhibitory influence can be manifested on the maximal activity of a cell, depending on the interval of precession of the activity of a contiguous cell.—(Courtesy of *Année psychol.*)

2004. Arvanitaki, A. **Phase de dépression relative de l'irritabilité consécutive à la réponse négative locale sur l'axone isolé de Sepia.** (Phase of relative depression of the irritability consecutive to local negative response on the isolated axone of *Sepia*.) *Bull. biol.*, 1942, 136, 6-11.—**Variations de l'excitabilité locale et activité auto-rythmique sous-liminaire et liminaire sur l'axone isolé de Sepia.** (Variations in local excitability and subliminal and liminal autorhythmic activity in the isolated axone of *Sepia*.) *Arch. int. Physiol.*, 1944, 53, 508-559.—Long after the cessation of a subliminal stimulation (exerting only a local action) there are manifested oscillatory variations of excitability whose curve has been established. The variations in excitability to a point where an autogenous activity is released have been evaluated according to the amplitude of an immediate response (extra-response) to an invariable stimulus whose action is inserted at different moments: in the course of the ascendant phase of a local action, there is a heightening of excitability, and a depression in the course of the descendant phase, which shows that an oscillatory variation of the excitability precedes the correlative oscillation of the

autorhythmic local oscillatory response. Following the extra-response one notes secondary perturbations with respect to the autogenous activity. If the extra-response is subliminal, it entrains a depression or a heightening according as it is itself depressed or heightened, but, from the moment that it becomes liminal, there is a consecutive depression (refractory phase).—(Courtesy of *Année psychol.*)

2005. Bremer, F., Bonnet, V., & Moldaver, J. Contributions à l'étude de la physiologie générale des centres nerveux. I. La sommation centrale. II. L'inhibition réflexe. III. L'"after-discharge" réflexe et la théorie neuro-chimique de l'activation centrale. (Contributions to the study of the general physiology of the nerve centers. I. Central summation. II. Reflex inhibition. III. The reflex "after-discharge" and the neuro-chemical theory of the mechanism of central activation.) *Arch. int. Physiol.*, 1942, 52, 1-56; 153-194; 215-248.—After having set forth in detail the results of researches on the frog and the toad of two volleys of successive centripetal impulses in the same fibres or in different fibres by picking up the medullar electrical waves and registering the reflex contractions, Bremer sets forth the following conception with respect to the subject of the mechanism of central summation: "At first the approximately synchronous impulses of the whole afferent volley aroused by the blunt impact of a stimulus sufficiently intense and extensive on a receptor zone summate themselves owing to the convergence on common interneurons or motor neurones. This immediate summation necessitates almost perfect synchronism of the punctiform synaptic excitations, and also, in all probability, a sufficient spatial proximity to the surface of the bombarded neurones. But the detonating excitations having remained infraliminal leave a more lasting trace of their impact on the nerve cells (cell-body and dendrites) whose excitability passes through a long phase of *supernormality* owing to which the impulses of a subsequent afferent volley can release the neuronic reaction which expresses itself by means of a discharge of axonic impulses. The speed of dissipation of this latent modification would determine the limit of the spacing still efficacious of the two reflexogenous impulses, unless a phenomenon peculiar to central neuronic aggregates intervened, which would prolong considerably the maximum interval of summation. In the mass of interneurons affected by the first afferent volley, the impulses of the latter release in general a prolonged activity, as if it was liberating there an accumulated potential energy. The impulses of this interneuronic "after-discharge" arrive at the motor neurones and recreate in the latter a latent excitation which permits them to respond to a second latent afferent volley long after (more than a tenth of a second in the case of the spinal center of Batrachia) the elementary latent modifications left by the impulses of the preceding volley have been dissipated." As to the inhibition provoked in the spinal frog by a single induction shock to the sensory nerve, it would be the simple consequence of the refractory state (subnormality) created in the interneurons situated

on the pathway of reflexogenous impulses, in conformance with the theory of Hughes and Gasser. Finally, the reflex "after-discharge," so manifest in the tonic muscles of Batrachia (but absent in the "kinetic" muscles), appears, in analogy with sensory responses of the cerebral cortex, as a manifestation of a tendency of central neuronic aggregates to autorhythmicity with the possibility of a neurochemical determinism by way of acetylcholine.—(Courtesy of *Année psychol.*)

2006. Chauchard, B., Chauchard, P., & Mazoué, H. Modifications de chronaxie des nerfs moteurs et sensitifs pendant le passage d'un courant constant dans la moelle. (Modifications of the chronaxy of motor and sensory nerves during the passage of a constant current in the spinal cord.) *Bull. biol.*, 1943, 137, 145-146.—With one electrode on the spinal cord and the other on the vertebral muscles, one modifies the motor chronaxies in the immediate neighborhood of the medullar electrode (an anodic diminution, a cathodic augmentation). With the 2 electrodes on the spinal cord, when the anode is lower (ascendant current) the motor and sensory chronaxies diminish, while they augment with a descendant current (even when the pericaryons are outside of the zone traversed by the current). There is no effect on the sensory ganglia. The intervention of the intramedullar neurones is invoked to explain the observed metachronoses.—(Courtesy of *Année psychol.*)

2007. Coppee, G. La transmission neuro-musculaire. Curarisation, décurarisation et renforcement à la jonction myo-neurale. (Neuromuscular transmission. Curarization, decurarization and re-enforcement at the myoneural junction.) *Arch. int. Physiol.*, 1943, 53, 327-507.—Blockage of the transmission of the nerve to the muscle reveals the properties of an intermediary functional organite, the "motor end plate," which presents peculiar modalities of response under the form of potentials not propagated when one excites the nerve, with transmission of an electrical nature (measurable synaptic delay) without necessary intervention of a chemical mediator. For a certain critical slow wave voltage of the plate there is a transmission of the excitation to the muscle fibre, which responds with a brief potential, susceptible of remaining localized or which propagates itself, with contraction, the critical voltage depending on the excitability of the fibres. Curarizing agents depress the amplitude of the slow wave stimulative of the fibres, and decurarizing agents (phenols, guanidine, veratrine) augment it. It is once more an electrical mechanism which governs the transmission of the plate to the fibre, with a delay too short to be measured, and the liberated acetylcholine is too weak in quantity and too slow to intervene. The curarizing agents have to produce an escape of the muscular potassium, which entrains a depolarization of the plate and a lowering in amplitude of its wave of slow potential, which is a cause of inefficacy. The summation process of the impulses, at the level of the nerve-plate interface, assures an increase in amplitude of

the local slow wave by means of the negative consecutive potential due to the antecedent impulse, and if this "after-potential" finds itself very much reduced, one no longer observes summation.—(Courtesy of *Année psychol.*)

2008. Lapique, L., & Lapique, M. Sur les réflexes croisés asymétriques. (On asymmetrical cross reflexes.) *Bull. biol.*, 1942, 136, 392-393.—Observations of Lenormant have shown in the guinea pig with unilateral tetanus, that the cross reflex was provoked by a single stimulation, if the latter was applied on the tetanic side. The tetanic toxin lowering—with a feeble dose—the chronaxies, the commissural neurone with large chronaxy, which is intercalated between the sensory and motor neurone, is modified in the sense of a facilitation of the reflex from the side where the toxin acts.—(Courtesy of *Année psychol.*)

2009. Muralt, Alexander L. von. Die signalübermittlung im nerven. (The signal transmission in nerves.) Basel: Birkhäuser, 1946, 354 p.—This is an endeavor to give a complete picture of the nature of nerve transmission of stimuli. It represents a combination of data from morphology, chemistry, physics, and physiology. The first part of the book deals with the structure of the nerve fiber, its histological design, physical and chemical properties. A second brief chapter is concerned with a general discussion of internal and external "signals." In the next chapter, about the internal signals, a detailed treatment of the subject of degeneration and regeneration of the peripheral nerves is offered. The last chapter describes the transmission of external signals with special attention to electrical, thermal, and chemical states (liberation of acetylcholine, aneurin, kalium). 135 illustrations (including 3 chromatic).—A. Rabin.

2010. Root, Walter S., (Johns Hopkins U., Baltimore, Md.), & Bard, Philip. The mediation of feline erection through sympathetic pathways with some remarks on sexual behavior after deafferentation of the genitalia. *Amer. J. Physiol.*, 1947, 151, 80-90.—Following extirpation of the spinal cord, from an upper level varying between L4-S1 down to S3, in 21 male cats, complete erection of the penis was obtained in test with estrous females. These preparations displayed full sexual excitement, grasping the female by the back of the neck and mounting. Copulatory movements appeared, limited by the amount of musculature denervated. Repeated tests revealed no diminution of sexual vigor. In such preparations bilateral removal of sacral sympathetic chain or the entire sympathetic chain below the diaphragm or resection of the hypogastric nerves was carried out. The results indicate that "the suprasacral vasodilator (erector) outflow is composed of fibers originating chiefly from the 2nd, 3rd and 4th lumbar segments of the spinal cord. . . . Exclusion of afferent impulses from the genitalia and indeed from the whole pelvic region and tail . . . does not influence sexual aggressiveness in male cats."—R. B. Bromiley.

2011. Van Wagenen, Wm. P. (U. Rochester, N. Y.) Observations on changes in states of mental depression and tension following surgical section of certain frontal lobe pathways. *Surgery*, 1946, 20, 656-662.—Case histories of the behavior effects of sectioning various frontal lobe pathways in 4 patients are presented. All 4 patients were suffering from mental depression and tension. It is concluded that "bilateral division of the white fiber pathways between the basal ganglion and frontal cortex is sufficient to secure relief. . . ." Division of white association fibers in the corpus is not followed by change.—(Rewritten: courtesy of *Biol. Abstr.*)

[See also abstracts 1970, 2264, 2266.]

RECEPTIVE AND PERCEPTUAL PROCESSES

2012. Bindrim, Edward. (Duke U., Durham, N. C.) A new displacement effect in ESP. *J. Parapsychol.*, 1947, 11, 208-221. At times subjects in tests of extrasensory perception miss the target card aimed at, and tend to hit the adjacent card—the one just ahead of or just following the target. In previous studies of this "displacement effect" the evaluation has been made in terms of the total number of "displacement hits" occurring in a series. The author has devised a new technique in order to provide a more sensitive measure of the effect. The new method measures the consistency of the displacement within each "run" of 25 trials made by the subjects. The number of runs showing a consistency of displacement in one direction in both halves of the run was compared with the number of runs in which the direction of displacement was not consistent from one half of the run to the other. A test of the new method was carried out on the data from 5 experimental series. It was found that consistency in direction of displacement (forward or backward with reference to the target card) occurred only in runs having from zero to 3 hits on the targets aimed at (where 5 hits are expected by chance).—B. M. Humphrey.

2013. Bruner, Jerome S. (Harvard U., Cambridge, Mass.), & Postman, Leo. (Indiana U., Bloomington.) Tension and tension release as organizing factors in perception. *J. Personality*, 1947, 15, 300-308.—The subjects adjusted a variable circular patch of light to match in size a circular disk held in the palm. The perceptual judgments were made under the influence of varying degrees of shock and during a recovery period. Results during shock did not vary markedly. However, during the post-shock period the deviations of perceived size from actual size became very marked. A theory of selective vigilance is tentatively proposed. In terms of it the organism makes its most accurate discriminations under conditions of stress. But when tensions are released expansiveness prevails and errors are more likely to result. 10 references.—M. O. Wilson.

2014. Falconer, D. S. (Cambridge U., England.) Sensory thresholds for solutions of phenyl-thiocarb-

amide. *Ann. Eugen., Camb.*, 1947, 13, 211-222.—Data collected by R. A. Fisher on threshold sensitivity for phenyl-thio-carbamide (P.T.C.) were analyzed. A concentration of P.T.C. of 50 parts per million, which had the minimum frequency of thresholds was used to separate tasters from non-tasters. 25.9% males and 22.2% females were non-tasters. Women had lower thresholds than men, but the ratio of tasters to non-tasters did not differ significantly in the sexes. Women tasters were less variable than men tasters. Smoking had no effect on sensitivity to P.T.C. A small positive correlation was found between sensitivity to P.T.C. and sensitivity to quinine. Women had lower threshold sensitivity to quinine than men. Analysis of published data on distribution of thresholds showed that American, Danish and British populations differ in the proportion of non-tasters, and the concentration of P.T.C. which most accurately separates tasters from non-tasters. 15 references.—S. Wapner.

2015. Mayer-Gross, W., & Walker, J. W. Taste and selection of food in hypoglycaemia. *Brit. J. exp. Path.*, 1946, 27, 297-305.—The authors studied the reactions of 100 patients as to their preferences for unknown drinks after allowing them to taste various solutions of saccharine, saline, 5% and 30% sucrose, and water. Blood sugar determinations were made at the time the subjects were tested. In 202 observations it was found that 30% sucrose was preferred if the blood glucose level was below 50 mg.% and rejected if it was above this value. 2 figures are included.—(Courtesy of *Biol. Abstr.*)

2016. Morselli, G. E. (*Ospedale Psichiatrico Provinciale, Novara, Italy.*) L'attività allucinatoria. (Hallucinatory activity.) *Arch. Psicol. Neurol. Psichiat.*, 1947, 8, 16-35.—Hallucinations are the expression of psychocerebral activity. The discrepancy between hallucination and sensation led to underevaluation of the sensorial content of the hallucinatory experience. The hallucinatory experience should be placed between pure images and pure sensorial facts. On the basis of clinical observations the author believes that the sensorial content is typical of the hallucination and is more significant than the "belief in its reality." This opinion is not in contrast with Freud's statement, that hallucinations are the expression of unconscious trends. The Freudian principle considers the emotional mechanism of hallucination, but does not explain its motor-sensorial content. Case material is included.—R. Calabresi.

VISION

2017. Betts, Emmett A. (*Temple U., Philadelphia, Pa.*) A new era for visual science. *Optom. Wkly*, 1947, 38, 1818-1820; 1834.—Binocular vision and visual skills and achievement make up a research field in the dynamics of seeing as contrasted with static physical optics.—D. Shaad.

2018. Bouman, M. A., & van der Velden, H. A. (*U. Utrecht, The Netherlands.*) The two-quanta explanation of the dependence of the threshold

values and visual acuity on the visual angle and the time of observation. *J. opt. Soc. Amer.*, 1947, 37, 908-919.—The results reported in this paper are in agreement with the hypothesis that two quanta of light are sufficient to excite a minimal visual response. The hypothesis holds for very brief flashes delivered to the peripheral retina over a very small visual angle. Longer exposure times and larger areas of stimulation yield higher thresholds in terms of the number of quanta required for an effect. There is a discussion of the relation of these findings to those of Hecht, who came to the conclusion that 5, 6, or 7 quanta were active in minimal stimulation. Measurements of visual acuity for a field of two black strips over a white background are found to agree with the two-quanta hypothesis.—L. A. Riggs.

2019. Bridgman, Charles S. (*Ohio State U., Columbus, O.*) The basis for failure on color vision tests. *Amer. J. Optom.*, 1948, 25, 3-17.—The anomaloscope provides for investigation of color vision intermediate between the usual tests and detailed laboratory studies. Subjects are required to vary a mixture of red and green until a yellow is matched. The proportions of red and green in the mixture yield the Rayleigh equation, which differs significantly for different types of anomaly. Judd's data on incidence of various types of color anomaly from such tests is given. Data from other investigators is also presented showing the characteristic luminosity curves. It is emphasized that the deuteranope differs from the normal in that green of a given brightness lacks chroma for him, while the protanope is not red-weak in a similar sense but for him the long wave-lengths of the spectrum lack brightness. ICI color diagrams indicate relations of various hues and confusions characteristic for protanopes and deuteranopes. Ishihara type plates are based on these confusions, using, for instance, oranges and purple pinks on a background of yellow greens and blue greens. Even when anomalous trichromats can identify these correctly, they may read the numbers wrongly because the orange may be seen to resemble yellow green more closely than pink, and pink to resemble blue green. Learning to pass tests of this sort may depend on learning to respond to less prominent differences, and also on recognition of figures which have been seen before as figures against ground. 33 references.—M. R. Stoll.

2020. Elvin, Fred T. A clinical survey of spherical aberration. *Amer. J. Optom.*, 1948, 25, 22-30.—The clinical correction (highest plus or least minus) required to give maximal acuity on the letter chart was compared with the lens required to make a point source appear smallest when projected on the same chart. This was done by using a rotated plano lens as a haploscope mirror before one eye so that light from a point source passing through a collimating lens was reflected into the eye. Additional lenses were added until the observer reported that the multiple images of the point source had their smallest diameter. On 100 consecutive patients with acuity of 20/20 the differences were found to range from

-0.38 D. to +1.32 D., with a mean of +0.27 D., selection of a minus lens being recorded as positive. In 63% the difference did not exceed +0.25 D. These differences have been termed the SA (spherical aberration) and are compared with data from other studies. Correlation with apparent pupil size was +0.43. The author concludes that to compensate for increase in spherical aberration associated with larger pupils in twilight vision, it may sometimes be desirable to correct for SA of more than +0.25 by addition of some concave power to the correcting distance lens.—*M. R. Stoll.*

2021. Feinberg, Richard, & Wirt, S. Edgar. (Purdue U., Lafayette, Ind.) Visual acuity in relation to illumination in the Ortho-Rater. *J. appl. Psychol.*, 1947, 31, 406-412.—By using the Ortho-Rater a series of slides with different levels of brightness illumination were presented to 100 students, to answer the question "To what extent can visual acuity be predicted at one level of illumination from visual acuity measured at another level of illumination?" Intercorrelations of acuity at different levels of brightness over a range of 10 to 1 are .80 to .90 for the far tests and .70 to .80 for the near tests. In occupational placement it follows that those who can see well in one job will also see better in another job on which there is a different brightness level.—*C. G. Browne.*

2022. Fisher, P. Untersuchungen über das Formsehen der Elritze. (Investigations of form-vision in minnows.) *Z. Tierpsychol.*, 1941, 4, 219-233.—Cardboard rectangles bearing letters to signify food are employed. The minnows learn to distinguish an U from an E, a W from an L or from an R, and R from a B (with 90 to 100% successes). Limits are ascertained for deformations still compatible with correct reactions. For groups of 2 to 4 letters (U W as against E L; W L as against L W; W R U M as against L R E E) the perception of the forms as a whole is obtained but not of the individual letters. Spontaneous choices show preferences for certain letters: X is preferred to O; W to M; V inverted to A upright.—(Courtesy of *Année psychol.*)

2023. Koomen, M., Scolnik, R., & Tousey, R. (Naval Research Laboratory, Washington, D. C.) Measurements of the spherical aberration of the human eye. *J. opt. Soc. Amer.*, 1947, 37, 992.—Abstract.

2024. Layton, Arthur Morgan, Meredith W., & Olmstead, J. M. D. (U. California, Berkeley.) Refractive changes produced by injection of fluids into the vitreous humor. *Amer. J. Physiol.*, 1947, 150, 568-571.—Injection into the vitreous humor of the cat or dog's eye of 0.2 cc. of fluids of various tonicity produces a transient state of hypermetria.—*R. B. Bromiley.*

2025. Misiak, Henryk. Age and sex differences in monocular and binocular critical flicker frequency. In *Fordham U., Dissertations accepted for higher degrees . . .*, New York, 1946, 13, 95-100.—Abstract of Ph.D. thesis.

2026. Nageotte, J. Sur la vision chez les vertébrés et chez les arthropodes. (On vision in the vertebrates and in arthropods.) *Rev. gén. Sci.*, 1942, 52, 65-72.—After some data on the transformation in vertebrates of the light image into a mental image, the author gives a profound analysis of the visual mechanism of reception by the compound eye of arthropods, basing himself on a direct study of the blue fly, *Calliphora vomitoria*. The author explains the hypotheses of Vigier which appear to him quite well founded.—(Courtesy of *Année psychol.*)

2027. Peckham, Robert H. Protection and maintenance of night vision for military personnel. *Arch. Ophthalmol., Chicago*, 1947, 38, 569-571.—Abstract and discussion.

2028. Posternak, J. (U. Lausanne, Switzerland.) L'adaptation visuelle à l'obscurité et le champ visuel à l'altitude. (Visual adaptation to darkness and the visual field at high altitudes.) *Helv. phys. pharmacol. Acta*, 1946, 4, C52.—During a stay at high altitude (3450 meters) the field of vision for white, red, yellow, and blue was not altered in 6 normal persons. Dark adaptation was accelerated. These results contrast with the results obtained at sea level in chambers with reduced pressure.—(Courtesy of *Biol. Abstr.*)

2029. Rand, Gertrude. (Columbia U., New York.) Recent advances in the physiology of vision. *Arch. Ophthalmol., Chicago*, 1947, 38, 529-531.—The writer discusses the significance to the ophthalmologist of a report by Hartridge (*Brit. med. J.*, 1947, 1, 913-916) on the continued acceptance of the trichromatic theory of color vision in the light of the recent findings of micro-retinal stimulation.—*S. Ross.*

2030. Schonwald, John DeWitt. (Miami U., Oxford O.) Visual examination for school children. *J. Lancet*, 1948, 68, 10-11.—The basic principles of simple visual acuity examinations for school or college students are described. The author warns about too complete acceptance of the usual visual fraction. He advises the use of a small chart with all letters the same size, rather than the standard Snellen chart, that the visual fraction should be recorded in terms of the greatest distance in feet at which the chart can be read, and that in the case of subjects having 20/20 vision it be measured with 0.75 spherical correction.—*C. M. Louttit.*

2031. Viaud, G. Recherches expérimentales sur le phototropisme des Rotifères. (Experimental researches on the phototropism of rotifers.) *Bull. biol.*, 1943, 77, 68-93.—Continuing his work of 1940, the author has devoted this new memoir to a series of new species (*Brachionus urceolaris* of Müller, *Asplanchna girodi* of Guerne, *Polyarthra trigla* of Ehrenberg, and *Reticula gelida* of Harring and Myers). The data are disengaged from the total study of 9 species examined, some without eyes, others with well constituted and rudimentary eyes. There is a photokinetic role of dermatoptic sensibility characterized by an increasing efficiency of spectral radiations, from orange to violet, and which

would intervene in the changes in sign of the phototropism. Reactions of orientation are connected with the sensitivity of the visual apparatus, whose maximum corresponds to about 540 m μ , with a greater extension from the side of red in the *Polyarthra trigla* whose ocular pigment is deep violet. The more the eyes are developed, the more precise is the orientation. An influence of the mode of life manifests itself in that the intensity of the phototropic reactions is greatest (independently of the ocular development) in pelagic species, and there is a secondary intervention of the mode of alimentation.—(Courtesy of *Année psychol.*)

2032. Viaud, G. *Recherches expérimentales sur le phototropisme des Rotifères. III. Stroboscopie des mouvements ciliaires. Mouvement ciliaire et phototropisme.* (Experimental researches on the phototropism of rotifers. III. Stroboscopy of the ciliary movements. Ciliary movement and phototropism.) *Bull. biol.*, 1943, 77, 224-242.—The author's work culminates in a series of data relating to the frequency and amplitude of the ciliary beatings of rotifers. This frequency, lowered by the action of cocaine, can be diminished by an inhibitory influence of the nervous system, but is not modified by light, while the amplitude—which governs the speed of swimming—increases with the intensity of the luminous excitation, according to a law of logarithmic progression, the luminous efficiency increasing with the frequency of visible radiations, from yellow to violet. The dynamogenic action of the light exerts itself directly on the locomotor ciliated cells without intervention of the nervous system, and manifests, in the pure state, the phenomenon of "photokinesis," linked with dermatoptic sensitivity, in the absence of a photoreceptive differentiation.—(Courtesy of *Année psychol.*)

2033. Willmer, E. N. (*Cambridge U., Cambridge, England.*) *Retinal structure and colour vision; a restatement and an hypothesis.* Cambridge, Eng.: Cambridge University Press, 1946. xii, 231 p. 21s.—The author proposes a theory to explain phenomena of colour vision which postulates three independent mechanisms in the retina, viz., cones, dark-adapting rods, and non-dark-adapting rods. The theory is developed by analyses of sensitivity to wave lengths and is related to empirically developed hue charts. The theory accounts for the relationship of hue to intensity and with the position of white and black.—*M. D. Vernon.*

[See also abstracts 1929, 1930, 1936, 1940, 2277, 2278, 2279, 2280, 2282, 2283, 2284, 2285, 2286, 2287, 2366.]

AUDITION

[See abstracts 2276, 2281.]

RESPONSE PROCESSES

2034. Domm, L. V., & Blivaiss, Ben B. (*U. Chicago, Ill.*) Induction of male copulatory behavior in the Brown Leghorn hen. *Proc. Soc. exp.*

Biol., N. Y., 1947, 66, 418-419.—"3 cases are described from 4 experimental groups totaling 24 birds, some observed for more than 4 years, in which single comb Brown Leghorn hens displayed male copulatory behavior following successive implants of testosterone propionate pellets. Implantations were begun when the birds were 4 days, and 1, 3, and 5 months old. These results contrast with earlier negative findings following single daily injections of this hormone." Further study of the factors controlling this behavior pattern is recommended.—*L. A. Pennington.*

2035. Grzimek, B. Die "Radfahrer-Reaktion." (The reaction of the cyclist.) *Z. Tierpsychol.*, 1944, 6, 41-44.—It appears that, in Germany, one calls it the reaction of the cyclist, for a man maltreated by a superior, to discharge his anger on an innocent, a feeble, an inferior, a member of his family, etc. The author reports, with photographs in support, examples of manifestations of this kind in different animals: chimpanzee, horse, monkey, donkey, wild ass. In general, it would be a question of animals whose anger had been excited by conduct of man towards them, that is to say of a superior being against whom all reprisals were impossible: this anger had therefore to seek a substitute. Such substitutions of objects reenter the frame of many instinctive activities.—(Courtesy of *Année psychol.*)

2036. Grzimek, B. Scheuersuche mit pferden. (Experiments on fear in horses.) *Z. Tierpsychol.*, 1944, 6, 26-40.—Previous experiments had shown that the horse reacts positively to the sight of panels representing horses of natural size, or of solid images (a horse crudely packed with straw). The author has sought to proceed, by means of figures of this kind, concerning the manifestations of fear in the animal. The latter, led by a groom, had to traverse a large room by entering through one door and by leaving through another. From the open door of entry he can perceive a panel figuring an articulated dog whose head the experimenter can move. A certain number of horses are seized with fear, rear on their hind legs and refuse to enter; the time is noted which is necessary for vanquishing this apprehension by encouragements or threats. But in a variant of the experiment, the same horses can perceive, from the door of entry, a second panel representing a horse. It was a question of knowing whether this sight would give them confidence and permit them to surmount their fear. The result was negative. A thing more curious, the presence in the same place of a living horse had no longer the effect that the image had (contrary to a belief very widespread among persons familiar with horses).—(Courtesy of *Année psychol.*)

2037. Harrell, Ruth F. (*Columbia U., New York.*) Further effects of added thiamin on learning and other processes. *Teach. Coll. Contr. Educ.* 1947, No. 928. v, 102 p. \$2.75.—The hypothesis that increased efficiency in psychological functions tends to follow liberal thiamin intake is investigated by using 37 to 55 matched pairs of orphanage children

over 1 year periods as subjects, 1 of each pair receiving daily thiamin, the other a placebo. 27 pairs are later maintained on thiamin for a second year, while 20 pairs are "reversed," receiving instead the placebo. Psychological tests of visual acuity, skill, reading, reaction time, rote memory, recall, educational achievement, and intelligence (power and time) are interpolated at stated intervals. Results show the thiamin group superior in performance on the 15 tests used, significantly so on 8. At the close of the second year this group still shows gains in performance whereas the "reversed" group gained in 8 activities, although showing no withdrawal effect on measures of intelligence, educational achievement, reaction time. The conclusion is reached that the effect of supplementary thiamin is not great enough to be noted over "short periods of time in all measures of performance," although the cumulative effect during a "lifetime may spell the difference between alert . . . living and a marginal effectiveness."—*L. A. Pennington.*

2038. Heinroth, O. *Ein Esel Erlebnis.* (An ass-experience.) *Z. Tierpsychol.*, 1944, 6, 146.—A description is given of the playings of a young she-ass with a man whom she accompanies on walks, playings in which the author sees the expression of a provocation of a sexual character.—(Courtesy of *Année psychol.*)

2039. Herter, K. *Mäuse und Mäusefallen.* (Mice and mouse-traps.) *Z. Tierpsychol.*, 1944, 6, 87-110.—The author has studied several types of mouse-traps; some kill the mice, others capture them alive. The principle is always the release of a spring by the activity of the animal himself. Consequently the study of the mouse's behavior presents a psychological interest. Here are some of the principal results. Several traps being placed in a large cage, those in the dark are more attractive than those in the light. The vicinity of the hiding place of the mouse is equally a positive factor of success. Contrary to common opinion, a trap which retains the odor of mice caught previously succeeds better than a new trap or one washed in boiling water. The males are caught more easily in traps which have retained the odor of females while the odor left by males does not attract the females. The author has equally studied the respective attraction of different sorts of bait. If one repeats the experiment with the same animals, habits are formed. The stay in the traps in which the mouse is simply detained some time does not appear to have an unfavorable action, unless it has been accompanied with the noise of a spring which frightens the animal. A trap which has killed a mouse is no less visited by others. These experiments are not without practical applications.—(Courtesy of *Année psychol.*)

2040. Jacobs, W. *Einige Beobachtungen über Lautäusserungen bei weiblichen Feldheuschrecken.* (Some observations on the emissions of sounds in female locusts.) *Z. Tierpsychol.*, 1944, 6, 141-144.—These observations have been made on two species of *Acridia*: *Stauroderus bicolor* and *Gomphocerus*

rufus, studied in captivity. The sounds are produced by the friction of the thigh against a rib of the wing. The female reacts in this fashion to sounds produced by the male when she is disposed to copulation, and it appears, in the second of these two species at least, that this response determines in its turn in the male the reaction of copulation.—(Courtesy of *Année psychol.*)

2041. Keeler, Clyde E. (*Georgia State Coll., Milledgeville.*) *Coat color, physique, and temperament; materials for the synthesis of hereditary behavior trends in the lower mammals and man.* *J. Hered.*, 1947, 38, 271-277.—Observations on some 15 different mammals and man indicate a positive correlation between certain coat characteristics and certain morphological, physiological, and behavioristic trends in mammals. In general, albinos among any animals are found to be weaklings. Light-skinned horses, such as the Palamino or Pinto, are gentle; dark-skinned chestnuts are unruly. Brindled cattle on the range become wild and ferocious, while black sports remain tame. Certain piebald sheep and white pigs are sensitive to foods which do not affect their dark-colored companions. Similarly comparisons are drawn for dogs, foxes, cats, squirrels, raccoons, mink, *peromyscus*, rabbits, rats, and mice. A high tuberculosis rate has been noted in Venetian blondes. Red-headed members have been known to have less resistance to disease, especially pneumonia; and also they react differently to anesthetics. Such observations should lead to the synthesis of complex behavior trends in mammals and man according to coat-character. 32 references.—*G. C. Schwesinger.*

2042. McMahan, Elizabeth A. (*Duke U., Durham, N. C.*) *A review of the evidence for dowsing.* *J. Parapsychol.*, 1947, 11, 175-190.—An examination was made of the various types of evidence for "dowsing"—the name given to "the practice of discovering, without geological or local knowledge, the exact location of any underground supply of water, ore, or other substances." After a survey of selected cases of purported success and of the various counter-hypothesis, the author writes that, although no definite conclusion concerning the dowsing hypothesis can be reached on the basis of available reports, the evidence is strong enough to justify an experimental attack on the problem.—*B. M. Humphrey.*

2043. Viaud, G. (*L'Institut Marey, Paris, France.*) *Le pouvoir réparateur du sommeil et sa mesure.* (The restorative power of sleep and its measurement.) *J. Psychol. norm. path.*, 1947, 40, 195-231.—In the first of two studies to determine under what external conditions sleep has the greatest restorative effects the author tried out the ratio: performance-after-sleep/performance-before-sleep as a possible index of recovery, the tasks being character-naming, color-naming, and stereoscopic acuity tests. However there appeared neither a correlation with the hours of sleep nor the expected advantage in the after-sleep scores. The diurnal performance curves of his 5 subjects showed peaks at 10 A.M.

and at 4-5 P.M., the latter being higher in the majority of cases. Performance at these hours when the activity of the day had acquired its regular momentum did correlate with hours of sleep. In the second experiment the Quantity of Sleep (Q.S.)—the product of duration and tranquility, the latter measured graphically in the record of the subject's movement in a specially constructed bed—was found to be closely dependent on external conditions particularly room temperature, optimal conditions approximating 20°C, 70-80% humidity. Q.S. was also sufficiently related to the level of maximum daily efficiency to justify use of this index as a measure of the restorative power of sleep, although physical conditions at the moment of testing played an even greater role, 25°C and 50-60% humidity being optimal during testing. The writer suggests application of his findings to the administration and interpretation of standardized tests.—*M. Sheehy.*

[See also abstracts 1991, 1995, 2010, 2031, 2032, 2172, 2256, 2365.]

COMPLEX PROCESSES AND ORGANIZATIONS

2044. Eysenck, H. J. (*Maudsley Hosp., London, England.*) The measurement of socially valuable qualities. *Eugen. Rev.*, 1947, 39, 103-107.—The paper attempts to answer the question of how near we are to making Galton's Utopia a possibility. Psychology has advanced in measuring intelligence and temperament, but has not been able to muster adequate public support. Research in social science requires large-scale planning, particularly so in the complex psychological problems. Such matters as detecting "generality" vs. "specificity" in character traits, "group factors" vs. "primary abilities" in intelligence, and the isolation of "socially valuable" qualities can be handled statistically. The non-cognitive field is structured around 2 main independent axes: (1) stability, and (2) extroversion-introversion. There may be other broad general factors still to be uncovered. While personality measurement is less advanced than is intelligence measurement, nevertheless, progress is being made. Social support is required to analyze the genesis of personality variables, their distribution and connection with age, sex, social status, birth order and so on.—*G. C. Schwesinger.*

2045. Humphrey, Betty M. (*Duke U., Durham, N. C.*) Simultaneous high and low aim in PK tests. *J. Parapsychol.*, 1947, 11, 160-174.—In a "double-aim" experiment on psychokinesis (PK), the author, acting as subject, threw 2 different kinds of dice from a cup at the same time and attempted to will them to fall so that positive scores would be obtained on one kind of dice and negative scores on the other kind. Throughout the experiment the target was the one-face, an excess of ones being desired on the "high-aim" dice and, at the same time, a deficiency of ones, on the "low-aim" dice. 6 red dice and 6 white dice were used in the tests and each set of dice served an

equal number of times in trials for high aim and in trials for low aim. A total of 64,800 die throws were made, half for high aim and half for low aim. The deviation from chance expectation was positive for the high-aim dice and negative for the low-aim dice. The CR of the difference between the two aims was 2.46. A detailed analysis showed that the desired result of both high aim and low aim in the same trial was accomplished only in the last third of each "set," the small scoring unit in which the results were recorded. Striking position effects were found within the set: U-curves of success appeared in both the high-aim tests and the low-aim tests.—*B. M. Humphrey.*

2046. McCurdy, Harold Grier. (*Meredith Coll., Raleigh, N. C.*) Basal metabolism and academic performance in a sample of college women. *J. educ. Psychol.*, 1947, 38, 363-372.—30 college women were tested for Basal Metabolism Rate, (BMR). The results were correlated with these students' psychology grades, Otis Test scores, Point Hour Ratio, and age. The relationship between BMR and Otis scores was negligible, but significant positive correlation was found between the BMR and all 3 other measures. The basal metabolism, then, appears to be related not to ability but to academic performance. It is not surprising to find sustained school work affected, in some degree, by the energy level of the student.—*E. B. Mallory.*

2047. Miller, J. G. Unconsciousness. In *Harvard University, Summaries of theses . . . 1943-1945*. Cambridge, 1947, 596-599.—Abstract of Ph.D. thesis.

2048. Pratt, J. G. (*Duke U., Durham, N. C.*) Restricted areas of success in PK tests. *J. Parapsychol.*, 1947, 11, 191-207.—In tests of psychokinesis an electrically-driven wire cage was used to throw 3 dice while the subject willed that they fall with a specified face uppermost. The total results, which were reported in an earlier article, were statistically significant. The present study is based on a detailed analysis of the results of one subject in the series who made the largest number of trials and whose results account for the significant total score of the whole series. In the original experiment the data were entered on the record sheet in 3-column blocks of trials. Detailed examination of these score blocks revealed that only the first and last trials of the first columns gave significant results. The author discusses the implications of this finding of restricted areas of success and compares the scoring trends in this series of tests with those of other tests made by the same subject.—*B. M. Humphrey.*

2049. Staudt, Virginia M. The relationship of testing conditions, intelligence and certain personality traits to errors and correct responses in several types of tasks among college women. In *Fordham U., Dissertations accepted for higher degrees . . .*, New York, 1946, 13, 100-106.—Abstract of Ph.D. thesis.

2050. Wisdom, J. O. Three dreams of Descartes. *Int. J. Psycho-Anal.*, 1947, 28, 11-18.—An account is given of 3 dreams of Descartes and speculations are offered as to their possible significance. 11 references.—M. H. Erickson.

[See also abstract 2364.]

LEARNING & MEMORY

2051. Grzimek, B. Das Erkennen von Menschen durch Pferde. (Recognition of human beings by horses.) *Z. Tierpsychol.*, 1944, 6, 110-126.—It is very doubtful that there exists in many animals an instinctive schema corresponding to the human form. It is therefore a question of an acquired knowledge due to a global perception in which, *a priori*, the dominant details can be of any kind whatever; it is therefore not surprising that the costume for example can play, in the recognition of a familiar person, a more important role than the face or voice. The author has conducted experiments on horses who allowed themselves to be saddled or bridled only by the person to whom they were accustomed. In general, these experiments show that a change in the costume of the latter sufficed to prevent the recognition: other experiments prove that a stranger can be confused with the customary person if he wears the clothing of the latter or if the animal is coming immediately to be bridled by the familiar person, etc.—(Courtesy of *Année psychol.*)

2052. O'Neill, Philip H. The effects on subsequent maze learning ability of graded amounts of Vitamin B₁ in the diet of very young rats. In *Fordham U., Dissertations accepted for higher degrees . . .*, New York, 1947, 14, 77-81.—Abstract of Ph.D. thesis.

2053. Postman, Leo. (Indiana U., Bloomington.) The history and present status of the law of effect. *Psychol. Bull.*, 1947, 44, 489-563.—The writer presents a survey of the history of the law of effect and an evaluation of its present status. The historical sources and early formulations are presented. Thorndike's laws of learning and the classical objections to retroaction are discussed, as are the nature of satisfiers and punishment. Information versus effect and the spread of effect are considered separately before an exhaustive section dealing with parametric studies. A major section treats the place of the law of effect in learning theory, and another section deals with the role of effect in complex learning. 332-item bibliography.—S. Ross.

2054. Taylor, D. W. The learning of radiotelegraphic code. In *Harvard University, Summaries of theses . . . 1943-1945*. Cambridge, 1947, 600-603.—Abstract of Ph.D. thesis.

[See also abstracts 1970, 2037.]

THINKING & IMAGINATION

2055. Alpern, Morris L. The ability to test hypothesis. *Sci. Educ.*, 1947, 30, 220-229.—An investigation among approximately 600 high school students

indicated that students' ability to test hypothesis depends in part upon a "habit of delayed response"; science students "demonstrate the ability to suggest and select procedures to test scientific hypothesis." This ability, however, is not highly correlated with intelligence, reading ability, and previous terms of high school science; little sex difference appears.—Courtesy of *Child Developm. Abstr.*

2056. Michaud, E. L'enfant et les figures géométriques. (The child and geometric figures.) *J. Psychol. norm. path.*, 1947, 40, 154-168.—In an investigation of the nature of their geometric reasoning, 2300 elementary school children between the ages of 10 and 15 years were asked what would happen if one of two triangles which they imagined drawn upon the ground were to be superimposed upon the other: would the moved figure change or retain its shape, and why? The answers fitted into 3 categories: (1) The realistic attitude—the triangle was regarded as a "thing;" (2) The technical attitude—ways and means of effecting the transfer were emphasized, with the possible effects of distractions, memory errors, etc., on the final shape of the triangle; (3) The "conceptual" attitude—the triangle was recognized as existing essentially in the mind. Although the percentage of responses of the first category decreased with age, and of the second and third increased with age, the author rejects the theory that these represent 3 consecutive stages in mental development, favoring the hypothesis that beyond the realistic phase development may proceed along lines of practical (spatial), or abstract intelligence. He suggests further experiments necessary to confirm the theory and to determine whether native predisposition, maturation or training accounts for the results.—M. Sheehan.

2057. Turchioe, Rita M. The relation of adjacent inhibitory stimuli to the central tendency. In *Fordham U., Dissertations accepted for higher degrees . . .*, New York, 1946, 13, 106-111.—Abstract of Ph.D. thesis.

INTELLIGENCE

2058. Bakwin, Harry. Glutamic acid and mental functioning. *J. Pediat.*, 1947, 31, 702-703.—Research indicates that the mental functioning of children and adolescents of various intellectual levels is probably increased by the continued use of glutamic acid.—M. C. Templin.

2059. Bonnardel, R. (l'École Pratique des Hautes Études, Paris.) Liaisons existant entre tests verbaux et tests de visualisation. Étude portant sur de jeunes apprentis. (Relations between verbal and spatial tests. A supporting study on young apprentices.) *Travail hum.*, 1946, 9, 195-200.—84 boys (mean age 14 years 3 months, S.D. 9 months) were given a battery of 8 verbal and 4 spatial tests. Coefficients of correlation between the tests can be accounted for satisfactorily by 2 factors. The 2 axes are oblique and, consequently, the factors correlated. The author does not form a definite opinion

concerning the nature of the common factor.—J. Brožek.

2060. Burt, Cyril. Critical notice of Thurstone's "Multiple Factor Analysis." *Brit. J. educ. Psychol.*, 1947, 17, 163-169.—In this development and expansion of his earlier "Vectors of Mind" Thurstone modifies his views regarding the absence of any general factor distinct from the primary abilities. His conception of a "general factor of the second order" underlying the "simple structure" of the several primary abilities suggests a basis for the reconciliation of his own theory of correlated multiple factors with Spearman's view of a general factor and Thomson's sampling theory. Rather than opposing multiple factor analysis, as Thurstone contends, British psychologists (Spearman excepted) in their earliest efforts at factorizing a correlation matrix employed a multifactor principle in the "principal axes solution." This was later replaced by a method identical with Thurstone's "centroid procedure." Practically, the importance of group factors has been generally recognized. The chief difference between the views of Thurstone and the author lies in the acceptance by the latter of a general factor in addition to the primary group abilities.—R. C. Strassburger.

2061. Flugel, J. C. An inquiry as to popular views on intelligence and related topics. *Brit. J. educ. Psychol.*, 1947, 17, 140-152.—Responses to a short questionnaire of 16 major items bearing upon the nature of intelligence were obtained from a sample of 302 adults lacking any specialized knowledge of psychology. Correspondence between the views of the layman and the professional psychologist is evident in respect to the possibility of measuring intelligence apart from education, and the absence of any significant sex difference in respect to intelligence. As compared with the psychologist, the layman does not distinguish sufficiently between intelligence on the one hand and experience, achievement, and orectic qualities on the other. He is generally unaware of the existence of non-verbal tests, is inclined to over-rate the value of tests for vocational purposes, and is not informed as to the wide use of tests for pure research. Respecting the cessation of intellectual growth after adolescence, the inherited character of intelligence as such, and the relative constancy of the IQ the average layman holds erroneous opinions. The implications of the fact of positive correlations among human abilities are generally unknown to him.—R. C. Strassburger.

2062. Hobson, James R. (Sch. Dept., Brookline, Mass.) Sex differences in primary mental abilities. *J. educ. Res.*, 1947, 41, 126-132.—The Chicago Tests of Primary Mental Abilities were given to students in the 8th and 9th Grades. Boys exceeded girls significantly in Spacial Orientation. Girls exceeded boys significantly in Word-Fluency, Inductive Reasoning, and Visual Memory. Other differences are not certainly significant at both grade levels. No significant and consistent sex differences were found in variability. In all of the Primary Mental

Abilities except Visual Memory 9th Grade means were higher than 8th Grade means for both boys and girls. The findings indicate the need for separate sex age norms for this test.—M. Murphy.

2063. Piaget, Jean. (U. Geneva, Switzerland.) *La psychologie de l'intelligence*. (The psychology of intelligence.) Paris: Armand Colin, 1947, 212 p. Fr. 80.—Based on a course given by the author during the war at the Collège de France, the subject is covered in 8 chapters dealing with the nature of intelligence, sensori-motor functions, and the development of thought. Intelligence is no longer considered a faculty but a state of final equilibrium toward which the successive adaptations of the sensori-motor functions tend, implying mental evolution and functional unity. The subject is placed on a biological basis and extricated from its traditional connection with logic. After passing in review the different operations that constitute thought, the relation is shown between these functional totalities. Bibliography.—G. E. Bird.

2064. Schulman, Mary Jean, & Havighurst, Robert J. (U. Chicago, Ill.) Relations between ability and social status in a mid-western community. IV: Size of vocabulary. *J. educ. Psychol.*, 1947, 38, 437-442.—The Seashore-Eckerson Test of Vocabulary was given to all children born in 1932 and to other 9th and 10th grade children in a certain typical midwestern community. The scores correlated .79 with scores on Thurstone V Factor and .75 with scores on the Iowa Silent Reading Test. The coefficient of correlation of vocabulary size with socioeconomic status was $.46 \pm .08$. No reliable differences were found between boys and girls, or between urban and rural pupils.—E. B. Mallory.

2065. Sylvester, R. W. (Command and General Staff Coll., Fort Leavenworth, Kans.) Military psychology—individual differences. *Milit. Rev., Ft. Leavenworth*, 1948, 27, 55-61.—This article deals with the concept of individual variance resulting from an inter-play of hereditary and environmental factors. Particular attention is given to the manner in which "a well organized training program will raise the level of proficiency at which an individual functions." The author, however, takes care to point out that this procedure will not "remove individual differences nor will it materially change the rank of an individual in comparison with others exposed to the same training." The distribution of individual differences, the relationship between mental and physical traits and the interrelationship of abilities resulting in specific clusters of abilities are emphasized as important concepts for the military commander.—M. A. Seidenfeld.

2066. Tilton, J. W. (Yale U., New Haven, Conn.) The relation between IQ and trait differences as measured by group intelligence tests. *J. educ. Psychol.*, 1947, 38, 343-352.—Data were secured from 5 testing programs which had employed certain forms of the following tests: National Intelligence, Pintner General Ability—Verbal series, Detroit Primary, Kuhlmann-Anderson, and Terman-McNe-

mar Test of Mental Ability. For each individual the trait variability was measured by the average deviation of his sub-test scores from his own mean. Taking the scatter or unevenness of the average IQ group as equal to 100% the combined data showed 110% unevenness for the dull group and 92% for the bright group. The trend toward an inverse relationship between intelligence and trait variability was shown consistently in all sections of the study, but the actual coefficient of this negative correlation was found to be very low.—E. B. Mallory.

[See also abstracts 1933, 1941, 1942, 1943, 1947, 1948, 1949, 1951, 2080, 2159.]

PERSONALITY

2067. Baud, Francis. *Physionomie et caractère*. (Physiognomy and character). Paris: Presses Universitaires de France, 1947. 126 p.—"Morphopsychology" is this author's unique system for analyzing personality from physiognomy and swagger. He has a 3-fold correlation, arrived at logically. From physiological manifestations of the individual, from fundamental biological characteristics, and from psychological manifestations, he forms a "psychophysical parallelism" chart. He then formulates the "morphopsychological analysis" hypothesis upon which the system is based. He considers "morphopsychology" an important discipline for all aspects of applied psychology, especially in the educational and vocational guidance of children and for personnel work in industry. He provides a rapid method by which psychologists and laymen might diagnose personality at sight. There is a history of previous efforts to establish a relationship between physiological factors and personality and a full bibliography to the literature in French.—L. R. Steiner.

2068. Cattell, R. B., Cattell, A. K. S., & Rhymer, R. M. (U. Illinois, Urbana.) P-technique demonstrated in determining psycho-physiological source traits in a normal individual. *Psychometrika*, 1947, 12, 267-288.—P-technique, a method employing intra-individual correlation, is tried out for the first time. As part of the general design it uses some variables the same as those in a coordinated R-technique study and a second, parallel P-technique study with a clinical case. Definite factors are obtained among the psychological and physiological variables, which can be mutually matched. One is a fatigue factor, but the rest are general personality factors readily identifiable with those obtained in past R-technique researches. 16 references.—(Courtesy of *Psychometrika*.)

2069. de Tray, Marcel. *Der Wille in der Handschrift*. Bern: A. Francke Verlag, 1946. 132 p. Fra. 10.80.—The will, which is defined as action the object of which is not the situation, but the subject's own realizing act, is expressed in handwriting in its different gradations and qualities. From the point of view of this definition the author investigates the handwriting for persons with different characteristics of will.—(Rewritten: courtesy of Erasmus.)

2070. French, Vera V. (Swarthmore Coll., Pa.) The structure of sentiments: I. A restatement of the theory of sentiments. *J. Personality*, 1947, 15, 247-282.—The term sentiment was used by Adam Smith, Spencer, and Bain but it was the writings of Stout, Shand, and McDougall that forcefully introduced it into the literature. History of the development of the concept is traced from these earlier writers to the present. Sentiment is also discussed in relation to complex and attitude. The author then presents a theory of sentiments based upon empirical evidence obtained from 2 studies. The first employed autobiographies, interviews, projective techniques, association tests, personality tests, intelligence tests and sociometrics, applied to college students. The other included clinical investigations of philosophical and religious sentiments of college students and faculty members. In developing the theory the following topics are discussed: structure of sentiments, genesis and development of sentiments, inter-relationship of sentiments, and the part of sentiments in personality structure. 44 references.—M. O. Wilson.

2071. Holt, R. R. Motivational factors in levels of aspiration. In *Harvard University, Summaries of theses . . . 1943-1945*. Cambridge, 1947, 603-607.—Abstract of Ph.D. thesis.

2072. Luborsky, L. B., & Cattell, R. B. (U. Illinois, Urbana.) The validation of personality factors in humor. *J. Personality*, 1947, 15, 283-291.—Correlations between humor clusters, responses to results of personality questionnaires, intelligence scores, and humor preferences were obtained. The humor clusters, 13 in number, had been previously determined by inspection. Results of the present study tended to validate the clusters. Some of the clusters correlated significantly with six (S T R G M I) of the Guilford-Martin Personality factors. One correlated with intelligence (ACE) scores. The study is significant in that it opens up a rich source of material and a method for the study of the psychology of humor.—M. O. Wilson.

2073. Schettler, Clarence. (Duke U., Durham, N. C.) Objective measurements of personality traits. *J. Personality*, 1947, 15, 292-299.—Limitations to objective measurements of personality traits include the following: (1) Objective and nonexternal definitions of a trait do not always indicate the same behavior. (2) Relations between private and common meanings are frequently overlooked. (3) Personality traits are complex: a trait may be both general and specific, depending upon the place of emphasis; and a trait may likewise be both changeable and constant. As to methodology, it should be observed that quantitative results need not imply objectivity and that exactness and accuracy are not always identical. 26 references.—M. O. Wilson.

2074. Wallace, William J. (Indiana U., Bloomington.) Personality variation in a primitive society. *J. Personality*, 1947, 15, 321-328.—Autobiography provides the best means for revealing personality differences in a primitive society. However, gossip

is an expeditious method and, although it is subjective, it is advantageous in revealing the attitudes of others about the personality of an individual. Use of the method is illustrated with several cases from the Hupa Indians of California. The results reveal a diversity of personality traits despite the rigid impositions of the Hupa culture. 23 references.—*M. O. Wilson.*

[See also abstracts 1945, 2013, 2146, 2149, 2152, 2155, 2158.]

AESTHETICS

2075. Lee, Harry B. (664 N. Michigan Ave., Chicago, Ill.) On the esthetic states of the mind. *Psychiatry*, 1947, 10, 281-306.—An esthetic orientation of mind is the precondition for the production and appreciation of art and artistic activity is not evoked by external factors. An esthetic state of the mind occurs as an unconsciously compelled need to achieve esthetic synthesis among the institutions of the mind, and between it and the outside world. Artistic experience is sought when it is required for its synthetic capacity in correcting the distress which has resulted from a relaxation of the function of pity. The assumptions that artistic experience result from an overflow of superfluous energy or from sublimation of sexual energy are wrong. Various esthetic states of the mind lead to varieties of art production and varieties of art appreciation. Each esthetic state results from a mental process unique to it, and each is dissolved by the particular artistic activity which it initiates. The assumption that the same esthetic state of the mind occurs in all makings and appreciations is not correct.—*M. H. Erickson.*

2076. Long, L. R. A new type of music interest scale. *Etude*, 1948, 66, 18; 52-53.—The tool is a questionnaire of 100 participle phrases to which the subject must respond in terms of Like, Indifferent, Dislike. The areas for which the test is intended include classical listening, classical playing, swing listening, swing playing, and related interests.—*P. R. Farnsworth.*

2077. Mursell, James L. (Columbia U., New York.) A tentative growth gradient in music. *Music Educators J.*, 1947, 34, 18-19.—The following growth stages are suggested as forming useful categories: (1) undifferentiated but significant emotional response to tone; (2) beginnings of differential response to tonal patterns; (3) beginnings of pattern-wise differentiation; (4) beginnings of responsiveness to different tonal media; (5) beginnings of responsiveness to different types of music; (6) beginnings of response to and interest in the rhythmic component; (7) beginnings of contact with standard instruments and their music; (8) beginnings of definitive achievement with performing media, particularly the voice; (9) creative and compositional activities differentiate more explicitly; (10) true specialization.—*P. R. Farnsworth.*

2078. Pommier, Jean. Flaubert et la naissance de l'acteur. (Flaubert and the development of the

actor.) *J. Psychol. norm. path.*, 1947, 40, 185-194.—Flaubert's powers of observation, imagery and identification found frequent expression in mimicry and even buffoonery. Although this secondary talent was allowed to remain relatively undeveloped, it was an integral part of his genius and exerted a strong influence on his writing.—*M. Sheehan.*

[See also abstracts 2296, 2303.]

DEVELOPMENTAL PSYCHOLOGY

2079. Baldwin, Alfred L. (Antioch Coll., Yellow Springs, O.) Changes in parent behavior during pregnancy; an experiment in longitudinal analysis. *Child Developm.*, 1947, 18, 29-39.—The behavior of the mother toward her children was rated before, during, and after pregnancy. Recent statistical developments provide methods for testing hypotheses concerning the pattern of changes among the 3 serial measurements and the total change can be analyzed into independent components. The results of such an analysis are presented and discussed.—*L. Long.*

2080. Terman, Lewis M., & Oden, Melita H. (Stanford U., Calif.) The gifted child grows up: twenty-five years' follow-up of a superior group. Stanford, Calif.: Stanford Univ. Press, 1947 xiv, 448 p. \$6.00.—This is the fourth volume in the *Genetic Studies of Genius series*, and its chief aim "is to give as complete a picture as possible . . . of what the group is like at the end of the first 25 years of testing and observation." The book contains an over-all report of the work done with the California group of gifted subjects from 1921 to 1946, and the greater part of its 26 chapters is devoted to a summary of the follow-up data obtained in 1940 and 1945. Consideration is given to mortality and health, mental health, education, vocations, marital adjustment, achievement, war records, etc. A new test, Concept Mastery Test, for measuring adult intelligence is described. The final chapter includes an appraisal of methods used, a list of generalizations believed to be warranted by the results to date, and plans for the continuation of the study. 115-item bibliography. (See also 1:162 and 5:1260).—*J. L. Gewirtz.*

CHILDHOOD & ADOLESCENCE

2081. Agazzi, Aldo. *Psicologia del fanciullo*. (Child psychology.) Brescia, Italy: La Scuola Editrice, 1946. 155 p.—The text gives consideration to the part to be played by the educator in child development. The educator is one who teaches the good life. Education is the means by which man is helped in promoting self-realization and self-development. "When individual differences, always profound, are neglected, education becomes abstract and difficult." As for child development, the many distinct parts grow together "harmoniously" and "contemporaneously" rather than "successively," with some parts more preeminent than others. The text covers diverse aspects of child psychology. To obtain a "psychological profile" of any child, the

author offers a series of questionnaires, each measuring some aspect of child development,—physical growth, intelligence, attitudes and habits, play, ethics and religion, etc. Due regard is given to a rigorously scientific approach "without confusing the issues with metaphysical and philosophical insertions; but, while emphasizing the value of experimental data, the author states that it is frequently necessary to surmount such data by more complete and unitary concept of human nature. This viewpoint may prove to be superior to that permitted by psychology as a pure positive science alone."—*N. De Palma.*

2082. Althoff, Becky. (*Jewish Family Service, New York.*) **Observations on the psychology of children in a D.P. camp.** *J. soc. Casewk.*, 1948, 29, 17-22.—The psychological effects of violent experiences upon displaced persons are discussed. There was found to be a similarity of background, of geographical movement, of traumatic experiences, of defense reactions for survival, and of the resultant behavior pattern which comprised the "characteristic" adolescent. The author describes typical factors of both the characteristic adolescent boy and girl. Group therapy with the children showed satisfactory results. Improvement was manifest in the decrease of tension and anxiety, and in the evidence of an increase of strength and stability.—*V. M. Stark.*

2083. Beverly, Bert I. **Mental aspects of growth and health.** *Illinois med. J.*, 1947, 92, 341-344.—Mental, as well as physical, growth is primarily the maturation of inherent potentialities. For the development of successful behavior in adulthood, parents must provide the child opportunity for growth according to the lines of his inherent potentialities. This involves providing, not only food and physical needs, but giving the child security, love, and the opportunity for growth.—*C. M. Louttit.*

2084. Bridwell, Mabel M. **From dependence to independence; the role of parent-child-teacher relationships.**—*Childh. Educ.*, 1948, 24, 219-223.—Various situations in which parents and teachers use the child in resolving their own emotional conflicts are described; the author concluded that "to the degree in which his parents and his teachers see [the child] as the person he really is, to that extent will they be able to guide his developmental possibilities as a sharing participating individual in the society to which he belongs."—*G. H. Johnson.*

2085. Goldstein, Marcus S. (*U.S. Public Health Service, Bethesda, Md.*) **Infants of Mexican descent. 1. Physical status of neonates.** *Child Developm.*, 1947, 18, 3-10.—Mexican neonates born in the United States were compared with those born in Mexico as to body weight, body length, and chest circumference. 16 references.—*L. Long.*

2086. Jones, Alma H. (*Iowa State Coll., Ames.*) **Constructive discipline.** (Rev. ed.) *Amer. Inst. Fam. Relat. Publ.*, 1947, No. 215. 21 p.—"Constructive discipline consists in such guidance as will enable the child in due time to make wise decisions

without a helping or hindering hand. This is accomplished by the gradual substitution of 'inner authority' for 'outer control.' The goal is that of helping the child to develop traits that prepare him to live in a democratic society, which requires self reliance, as well as concern for the welfare of others." The author points out that child conservation is the goal of discipline, also that the child has a right to direction and guidance. Democratic, autocratic, and anarchistic types of discipline are discussed, as well as the values of various methods of discipline. Sections are devoted to general aids in discipline (keeping the child physically fit, consistency in demands, etc.), methods of punishment (bodily punishment, isolation, etc.), and rewards (approval, allowing pleasures, building self-respect).—*L. H. McCabe.*

2087. Koshuk, Ruth Pearson. (*Bellflower Sch. Dist., Bellflower, Calif.*) **Developmental records of 500 nursery school children.** *J. exp. Educ.*, 1947, 16, 134-148.—This is a preliminary report of 500 developmental records collected between 1943-46 in two California nursery schools attended by children of employed mothers. The records consist of a pre-entrance interview with the mother, observational notes and semester reports by teachers, and an interview with the mother when the child is withdrawn from nursery school. An analysis of these records shows that more than four-fifths of the children are considered to have made good or excellent general progress, especially in social and emotional growth. "Mothers report similarly favorable changes in home behavior, especially in social adjustment and independence in self-care routines. . . . It seems possible to conclude that, for the community studied, the child care program for under-fives has reduced tensions, lessened friction in the home and insecurity in non-home situations, and so benefited the children and strengthened family living."—*G. G. Thompson.*

2088. Kuhn, Anne L. **The mother's role in childhood education: New England concepts, 1830-1860.** New Haven, Conn.: Yale University Press, 1947. 224 p. \$3.00.—The study reported in this volume is based on an analysis of books and periodicals published between 1830 and 1860 which were directed to young women as prospective homemakers, and to mothers and fathers concerned with the physical, mental, and spiritual welfare of the rising generation. The author finds that in these early decades of the 19th century there was in America a changing attitude toward the function of both women and children in a democratic society. The home, as an educational agent, was increasingly recognized and because it was, there was a demand that women be released from old bonds of submission and given greater intellectual advantages. The importance of the child was recognized and much of the literature under survey was directed toward helping the mother in the matter of her child's education. The author discusses, with illustrations from the literature, such problems as the general cultural setting, the growing recognition of the social importance of

mothers and young children, and the mother's role in the child's education, religious and moral, in intellectual activities, in health and hygiene, and in the general problems of discipline. Extensive bibliography.—C. M. Louttit.

2089. Macaulay, Mary. *The tree of life of the human personality*. Ashington, Rochford, Essex: C. W. Daniel, 1947. 32 p. 2s.—The author finds the tree a suitable symbol of personality development, infancy being represented in the roots, childhood in the trunk, adolescence in the branching limbs. The yield of the tree depends on the maintenance of harmonious balance between the normal instincts which tend by nature to be paired antagonistically: love of independence against love of regimentation, team spirit against self-assertion, etc. Under the "negative" deforming influence of traditional human prejudices—the "psychological slums" to which the child is early exposed—the design of growth is "sensationalized," with ultimate damage to the individual and to the society of which he forms a unit. Respect for the child's ego and balanced control of his will through love and reason are requisite for positive fulfillment of the individual's potentialities. Training for parenthood, Family Problem Councils, and a greater assumption by women of a positive role in the reorganization of social life are among the recommendations made for building a more wholesome and peaceful society.—M. Sheehan.

2090. Martin, John H. *A study of the measurable effects of group discussion of adolescent problems upon certain personal and social attitudes of ninth grade boys*. In *Fordham U., Dissertations accepted for higher degrees . . .*, New York, 1946, 13, 39-44.—Abstract of Ph.D. thesis.

2091. Mirow, E. *Über Wachstum und Entwicklungsstand volksdeutscher Kinder des Warthegaues und Vergleichsuntersuchungen an ihrer Heimatbevölkerung des Altreichs*. (Beitrag zum Accelerationsproblem.) (On the growth and developmental level of German children in Warthegau and comparisons with their native population of the Old Reich. Contribution to the problem of acceleration.) *Z. Kinderheilk.*, 1942, 63, 301-318.—Children from 10 to 18 living in the eastern and western sections of Schwabia were compared on physical measurements such as height, weight, and chest circumference, and on their level of maturity as determined by Zeller's classification. The western children are about one year accelerated in growth patterns. The mean age of menarche in the west is 13 years 4 months in contrast to 14 years 6 months in the east. The distribution of age of maturation emphasizes the differences in the two sections since about 25% of the boys and 28% of the girls in the west mature early as compared to 5.8% and 8.3% of the eastern group. In contrast to this about 12% of the boys and 22% of the girls in the west mature late as compared to 42.3% and 41.7% of the eastern group. Many variations in body build are observed during puberty. Despite the later development of

children in the east, the age of maturation is becoming younger in this area, since the mean age of menarche in girls has fallen from 15 years 1 month between 1870 and 1900 to 14 years 10 months between 1900 and 1920, and to 14 years 6 months from the latter date on. The possible effect of climate, nutrition and urbanization upon the differences in growth patterns of these children from the same racial stock is discussed.—M. C. Templin.

2092. Mummery, Dorothy V. (U. Georgia, Athens.) *An analytical study of ascendant behavior of preschool children*. *Child Developm.*, 1947, 18, 40-81.—The objectives of this study were: (1) "to refine the measurement of ascendant behavior of preschool children by taking into account the social acceptability of the methods used in attaining or maintaining an ascendant position, (2) to determine the relationship of this new measure to the ascendance score used by Jack, and (3) to investigate the nature of the changes produced in the scores of non-ascendant children who have been trained in self-confidence by the Jack method." Results based on a group of 42 three and four-year old children, observed in a controlled play situation, are reported. 16 references.—L. Long.

2093. Muste, Myra J., & Sharpe, Doris F. (Mount Holyoke Coll., South Hadley, Mass.) *Some influential factors in the determination of aggressive behavior in preschool children*. *Child Developm.*, 1947, 18, 11-28.—Preschool children from 2 environments were observed in 2 standardized experimental situations in order to discover the possible relationships between factors of age, sex, gross environmental differences on the one hand, and the frequency and the types of aggressive behavior, on the other hand. The techniques of responding to aggression were also studied. The number of aggressive responses was found to increase with age, and the frequency of aggressive responses was greater among boys than among girls.—L. Long.

2094. Oppenheimer, Celia, & Kimball, Ruth F. (Woodrow Wilson High School., Washington, D. C.) *Ten-year follow-up of 1937 high school graduates*. *Occupations*, 1948, 26, 228-234.—The results of a questionnaire study of 108 boys and 110 girls 10 years after graduation from high school are presented in detail. 77% have had some additional education; 45% have received a bachelor's degree; and a few have received graduate and professional degrees. A large majority are employed in professional, semi-professional, clerical, sales, and kindred occupations.—G. S. Speer.

2095. Sapire, M. *Child and society*. Essex, England: C. W. Daniel, 1947. 148 p. 9s.—"This is an account of an attempt to produce a child in perfect health and to maintain him in such a condition for at least the first 2 years of life." The process begins by the parents establishing agreement as to the sex of the child, his name, etc. "In this way a preference is established in the brain and, in so far as the brain exercises an influence on the material from which the genes are built up, this preference

is transmitted to them." The author considers his project in the light of social systems and institutions, philosophy, psychology, health and diet.—*J. L. Gewirtz.*

2096. Schmidt-Voigt, Jürgen. Variationen im Erscheinungsbild des schnellreifenden Jugendlichen. (Variations in the appearance of early maturing boys.) *Z. Kinderheilk.*, 1942, 63, 356-366.—Precocity in maturation of boys is shown in harmonious and disharmonious growth patterns. In the harmoniously accelerated growth pattern, development in height, change of body form, and primary and secondary sex characteristics are all concordantly speeded up. In the disharmoniously accelerated growth pattern there is unequal development in height, change of bodily form or genital structure so that an unbalanced growth pattern results. Types of disharmonious growth patterns are described and illustrated. Disharmonious development is likely related to disturbances in the endocrine system.—*M. C. Templin.*

2097. Yedinack, Jeanette G. A study of the linguistic functioning of children with articulation and reading disabilities. In *Fordham U., Dissertations accepted for higher degrees . . .*, New York, 1947, 14, 82-87.—Abstract of Ph.D. thesis.

[See also abstracts 2001, 2056, 2127, 2175, 2177, 2315.]

MATURITY & OLD AGE

[See abstracts 1994, 2002.]

SOCIAL PSYCHOLOGY

2098. [Anon.] A summary of opinion polls throughout the world. *Int. J. Opin. Attitude Res.*, 1947, 1(3), 127-152.

2099. Arsenian, J. A study of reactions to socio-economic frustration. In *Harvard University, Summaries of theses, 1943-1945*. Cambridge, 1947, 607-610.—Abstract of Ph.D. thesis.

2100. Eysenck, H. J. (*Maudsley Hosp., London, England*.) Primary social attitudes: 1. The organization and measurement of social attitudes. *Int. J. Opin. Attitude Res.*, 1947, 1(3), 49-84.—To isolate primary social attitudes, a 40-item questionnaire administered to 750 subjects was factor analyzed. The items were chosen from those found to have high loadings in previous factorial studies of attitudes and other items were added by random selection. The subjects were chosen from a middle class, urban English population so as to include equal numbers from 3 political groups matched on age, sex, and education. Tetrachoric *r*'s among the items were analyzed by Burt's summation and group factor methods. The first factor, validated against party affiliation, is termed radicalism-conservatism. The second main factor is tentatively labeled tender-tough mindedness. Re-analysis of the items divided into 2 groups, with 5 items common to both, shows the non-rotated factors to be meaningful and invariant, contrary to Thurstone's contention. Scales

to measure these 2 factors are then described as to content, reliability, group differences, intercorrelation, and validity. Finally, there is a discussion of (1) anti-semitism and its determinants, (2) liberalism as a political doctrine, and (3) levels of organization of social attitudes.—*N. L. Gage.*

2101. Link, Henry C. (*The Psychological Corporation, New York*.) What does Americanism mean to the American people? *J. appl. Psychol.*, 1947, 31, 425-430.—An interview survey of 956 rural residents, and 5,000 urban residents, classified into 4 socioeconomic groups, reveals percentage returns on the following general topics—compulsory military training; self-reliance vs. paternalism; private vs. state capitalism; incentives and privileges; differences between American democracy, communism, and fascism; unions and the closed shop; racial equality in employment; and where understanding of Americanism is derived.—*C. G. Browne.*

2102. Odum, Howard W. (*U. North Carolina, Durham*.) Understanding society; the principles of dynamic sociology. New York: Macmillan, 1947. vi, 749 p. \$5.00.—The parts of this comprehensive textbook are headed as follows: Preview to the understanding of society, society and nature, society and culture, society and civilization, society and the people, society and its problems, social research and social theory. A significant characteristic of the book is the emphasis put on the regional approach. At the end of each of the 38 chapters is a section called "Library and Workshop" with assignments and questions, readings, annotated bibliographies, and projects for study from firsthand sources.—*F. Heider.*

2103. Parsons, Talcott. (*Harvard U., Cambridge, Mass.*) Certain primary sources and patterns of aggression in the social structure of the Western world. *Psychiatry*, 1947, 10, 167-181.—All social behavior is ultimately the behavior of human beings, understandable in terms of the motivations of individuals singly and collectively, in the situations in which they are placed. Aggressive tendencies constitute the most important single factor in dangerously disruptive potentialities. Sources of aggression lie in the kinship system and the occupational system, both of which determine significantly the structure of group hostility. 14 references.—*M. H. Erickson.*

2104. Strunk, Mildred. [Comp.] (*Princeton U., N. J.*) The quarter's polls. *Publ. Opin. Quart.*, 1947, 11, 474-499.—A topically arranged compilation of the results of polls based upon a cross section of the total national population of the United States and other countries and reported during the period from May 15 through August 15, 1947.—*H. F. Rothe.*

2105. Trotter, Wilfred. *Instincts of the herd in peace and war*. New York: Macmillan, 1947. 270 p. \$2.50.—This posthumous edition differs from the earlier (1916 and 1919) ones in that very slight changes are introduced to make clear the distinction between the 2 wars. The instinct of gregariousness is a fundamental quality of man, and a unifying

factor in society. Members of the herd are sensitive to the behavior of their fellows; a resultant advantage is the homogeneity of the herd. These and related theses are explored, and applied to the nations and conditions involved in World War I.—H. A. Gibbard.

[See also abstracts 1918, 2044, 2090.]

METHODS & MEASUREMENTS

2106. Chapin, F. Stuart. (*U. Minnesota, Minneapolis.*) *Experimental designs in sociological research.* New York: Harper, 1947, x, 206 p. \$3.00.—The introduction to this work is a chapter made up from an article originally published in 1917. It is a short history, positivistically oriented, of social and sociological experimentation, e.g., the Owen and Fourier attempts at founding societies on a scientific and humanitarian basis. These are granted the status of experiments, but criticized because they were not sufficiently oriented to fact-finding. They represented one of the many types of trial-and-error to be found in any scientific work. Three major sociological designs are then presented and instances of each are given. The methods are: cross-sectional investigated by "controlled comparisons for a single date by procedures of selective control"; projected (before and after), an attempt to study the effects of a social program at a future date on the basis of a follow through from initiation to completion; *ex post facto* design . . . in which some present effect is traced backward to an assumed causal complex of factors. . . . After the illustrative material there is a final theoretical chapter in which some of the problems of selection and treatment of data are reviewed. The Fisher type of problem is involved in these discussions but there is no explicit consideration of the designs generated by Fisher.—R. A. Littman.

2107. Crutchfield, Richard S. (*Swarthmore Coll., Pa.*), & Gordon, Donald A. *Variations in respondents' interpretations of an opinion-poll question.* *Int. J. Opin. Attitude Res.*, 1947, 1(3), 1-12.—A question concerning desire for post-war reforms, previously reported by the Gallup Poll, was asked of 114 respondents and followed by intensive, non-directive interviewing to ascertain the respondent's interpretation of the question. Results indicate wide differences in the nature and frequency of various interpretations of the question, marked relationships between interpretation and answer, the artifactual nature of sex differences in opinion due to sex differences in interpretation, and frequent spontaneous shifts in interpretation during the interview. Single questions on complex issues may therefore be dangerously inadequate in representing opinions.—N. L. Gage.

2108. Gallup, George. *The quintamensional plan of question design.* *Publ. Opin. Quart.*, 1947, 11, 385-393.—This paper describes a system of question design which has been evolved out of many years of research by the A.I.P.O., and which is believed to

answer some of the criticisms of public opinion measuring. The technique provides an opportunity for probing 5 aspects of opinion. (1) Filter and information questions find out if the respondent has given any attention or thought to the issue. (2) Open or free answer questions get at unstructured opinions and reveal the direction of the respondent's thinking. (3) Dichotomous or specific issue questions are those in which the public is asked to stand up and be counted on specific issues. (4) The fourth kind of question asks the respondents why they hold the opinions they do. (5) The last kind of question measures the intensity of the opinions.—H. F. Rothe.

2109. Harding, J. S. *The measurement of civilian morale.* In *Harvard University, Summaries of theses . . . 1943-1945.* Cambridge, 1947, 589-592.—Abstract of Ph.D. thesis.

2110. Herzog, Elizabeth G. (*New York City Committee on Mental Hygiene, N. Y.*) *Pending perfection: a qualitative complement to quantitative methods.* *Int. J. Opin. Attitude Res.*, 1947, 1(3), 31-48.—The correspondence panels used by the Government Information Service are described and evaluated. Intended to maximize depth and validity and to minimize expense, the panels consisted of groups of correspondents selected to represent 6 occupations: small businessmen, editors, housewives, social workers, labor spokesmen, and clergymen. Location, freedom from bias and articulateness were also factors in choosing correspondents. Monthly general letters and occasional directed reports were secured from the panels. Differences between correspondence panels and the usual opinion poll are pointed out. The special values of the material secured relate to (1) degree and quality of interest and feeling, (2) level of information, (3) reasoning for or against, (4) extent and nature of doubts, qualifications, contradictions, (5) stereotypes of word and idea, (6) changes and developments in opinion, (7) recurrent themes, (8) panel differences. Some comparisons of correspondence panel with poll findings are reported. Finally, there is a discussion of the limitations of the technique and of research needs and possibilities.—N. L. Gage.

2111. Schiller, Paul H. (*Columbia U., New York.*) *A Hungarian survey on sympathetic attitudes.* *Int. J. Opin. Attitude Res.*, 1947, 1(3), 85-92.—A brief history of recent opinion research in Hungary is followed by a report of responses to various questions dealing with basic social relations, or the primary motives of association between people.—N. L. Gage.

2112. Suchman, Edward A. (*Cornell U., Ithaca, N. Y.*), & Guttman, Louis. *A solution to the problem of question "bias".* *Publ. Opin. Quart.*, 1947, 11, 445-455.—Slight differences in phrasing, order of questions, and similar variations often yield different proportions of "favorable" and "unfavorable" responses. The writers describe a method based on scale analysis and intensity analysis techniques as an objective method of dividing responses into pros and

cons so that the division does not vary with question wording. The theory will soon be published elsewhere; the present paper illustrates the consequences of the theory when put into practice. The method results in an intensity curve, the lowest point of which will be the same for any sample of questions from the same scale or dimension of opinion. The same persons will be found to the right and the left of this point regardless of the variations in wording for a series of questions. Two surveys that illustrate the points are discussed.—*H. F. Rothe.*

2113. Various. Survey on problems of interviewer cheating. *Int. J. Opin. Attitude Res.*, 1947, 1(3), 93-106.—Problems involved in cheating by interviewers are discussed by 7 participants.

[See also abstracts 2355, 2378.]

CULTURES & CULTURAL RELATIONS

2114. Anderson, Edward L. (*New York U.*) The English teacher and intercultural relations. *J. educ. Sociol.*, 1947, 21, 140-145.—Intercultural relations embrace groups of different race or nationality backgrounds, of different religious beliefs, and different socio-economic groups. Behind tensions in intercultural relations are a complex of causes including the wish of individuals to belong to a we-group, ignorance and erroneous "knowledge," and socio-economic competition. The English teacher may modify the second of these by building up appropriate reading programs, group projects and individual report work, and by avoiding assignments that cause embarrassment to members of minority groups.—*H. A. Gibbard.*

2115. Arreche, Paquita R. Vocational needs of the Puerto Rican migrant in New York City. In *Fordham U., Dissertations accepted for higher degrees* . . . , New York, 1946, 13, 26-30.—Abstract of Ph.D. thesis.

2116. Blythe, June. Can public relations help reduce prejudice? *Publ. Opin. Quart.*, 1947, 11, 342-360.—Organizations working toward democratic ethnic relations are attempting to move people in directions that are opposite to their personal prejudices, opposite to the approved social patterns, and without any apparent reward. Public relations in general do not have these handicaps. The techniques used by inter-group organizations were surveyed by means of a questionnaire and the underlying assumptions of their programs are analyzed. Studies of the effectiveness of this work indicate that much of the effort is misdirected. The basic assumptions are often unfounded and the methods inadequate. What is needed is a more complete organization whereby small groups work in face-to-face situations rather than the present wholesale sowing of materials by national organizations. Other new directions are also discussed.—*H. F. Rothe.*

2117. Kaufman, S. Harvard. (*Seattle Guidance Clinic, Wash.*) Prejudice as a sociopsychiatric responsibility. *Amer. J. Psychiat.*, 1947, 104, 44-47.

—The author outlines the factors involved in the psychology of prejudice and suggests methodology and responsibility of the psychiatrist in this important phase of the welfare of mankind. His responsibility is group therapy and inter-dependent understanding in its largest sense. By this participation, it is hoped that the psychiatrist can really contribute to the gradual elimination of the barriers to our collective emotional maturity so that differences can be utilized and accepted and that discrimination and its aggressive reactions become a rare, delimited and curable disease.—*R. D. Weitz.*

2118. Rife, David C. (*Ohio State U., Columbus, O.*) Dice of destiny; an introduction to human heredity and racial variations. (2nd ed.) Columbus, Ohio: Long's College Book Co., 1947. 179 p. \$2.25.—The book deals in part with the principles of heredity as applied to individual and racial variations and their relation to various social, economic, and political problems in a democracy. Basic principles of heredity and gene behavior are considered through a study of taste and blood variations. Other common traits, such as mental capacity, special abilities, and personality, which owe their variations to interactions of heredity and environment, are reviewed as to their make-up, origin, and determining influences. The role of the gene is considered for its political significance rather than from the usual medical point of view. An appreciation of the fact of real racial differences need not necessarily imply correlative concepts of superiorities or inferiorities; but rather it should offer grounds for differential treatment, education in the spirit of tolerance, legislation based on understanding, advance emerging from merit, and institutions and efforts supported by a spirit of unselfishness. 55-item bibliography.—*G. C. Schwesinger.*

2119. Rothney, John W. M., & Hansen, Martin H. (*U. Wisconsin, Madison.*) Evaluation of radio instruction in inter-cultural relations. *J. exp. Educ.*, 1947, 16, 101-121.—An exploratory study was conducted with 446 experimental and 403 control children to determine the effects of a weekly radio broadcast, "Adventures in Our Town," on upper elementary-school pupils' attitudes and behavior. These radio programs were designed to teach children to recognize the basic value of the individual, to judge people by their own merits, and to overlook differences of race, religion, and color. Among the many tentative findings: 97% of the pupils in the experimental group reported liking the program; factors such as race, nationality and religion, or economic status are not important in the experimental pupil's choice of radio characters as friends; three-quarters of the teachers state that the program produces better pupil thinking and action. Significant differences were found between listening and non-listening groups of pupils in favorable attitudes toward members of other groups, however, "All of the differences cannot, under the conditions of this study, be attributed to the influence of the broadcasts." There was considerable evidence that

pupils identify radio characters with people in their own communities.—G. G. Thompson.

2120. Sereno, Renzo. *Cryptomelanism; a study of color relations and personal insecurity in Puerto Rico. Psychiatry*, 1947, 10, 261-269.—Cryptomelanism is defined as a constant effort to hide the existence of the color problem within the self. Report is given of the effects of racial discrimination and segregation in Puerto Rico and the numerous psychological implications of the color problem. 24-item bibliography.—M. H. Erickson.

2121. Stumpf, Florence, & Cozens, Frederick W. (U. California, Berkeley.) *Some aspects of the role of games, sports, and recreational activities in the culture of modern primitive peoples: I. The New Zealand Maoris. Res. Quart. Amer. Ass. Hlth*, 1947, 18, 198-218.—The Maoris are reported as firm believers that "physical welfare formed the basis for all activity, educational or otherwise, and fully recognized the value of games and sports for training in self-confidence and self-control." They have developed a wide variety of sports and amusements that are well supervised and encouraged, specifically as "(1) training for war, (2) acquiring skill and grace, (3) contributing to economic efficiency, (4) being fundamental to their recreational life, (5) a means of promoting tribal loyalty and solidarity, and (6) an outlet for health competitive urges in an otherwise cooperatively organized social structure." Implications for the profession of physical education are pointed out. 20 references.—M. A. Seidenfeld.

[See also abstracts 2074, 2133, 2194.]

SOCIAL INSTITUTIONS

2122. Benne, Kenneth D. (Teacher's Coll., Columbia U., New York.) *Leaders are made, not born. Childh. Educ.*, 1948, 24, 203-208.—Democratic leadership requires attitudes, understandings, skills more complex than those required by the autocrats. Though difficult, these can be learned. Leadership should be seen in terms of functions to be performed in helping groups to grow and to operate productively, not in terms of qualities inherent in certain persons. Two sets of principles are given: one has to do with services required within the group in helping it to grow to greater maturity; a second with services required by any group in keeping the processes of planning, acting, and evaluating productive and geared to the changing environment in which it lives and acts.—G. H. Johnson.

2123. Mead, Margaret. (Amer. Museum Natural Hist., New York.) *What is happening to the American family? J. soc. Casewk*, 1947, 28, 323-330.—The author points up the realization of our behavior in marriage as a systematic pattern; and suggests the need for a new ethic for family life which would be appropriate to the new, smaller, and isolated form in this country today.—V. M. Stark.

2124. Schneider, David M. *The social dynamics of physical disability in Army basic training. Psy-*

chiatry, 1947, 10, 323-333.—There develops in Army basic training a patterned sick role for those with physical disabilities. At first, it is group sanctioned because it permits the focussing of resentment and aggression against the Army. With the advent of military adjustment, group sanction is lost, and aggression against the physically disabled results with a final adjustment by the stable isolation of the sick from the group. Cultural functions of the sick role were the draining off of deviants and providing the individual soldier escape from a painful situation. The punishing price paid by the soldier directly supported the organization of society around military goals. Such psychological isolation gave rise to social isolation. The channeling of psychological symptoms into physical manifestations permitted recognition of deviants. Fourth, the displacement of aggression from the sick to outside the group facilitated the displacement of aggression upon the enemy.—M. H. Erickson.

2125. Truxal, Andrew G., & Merrill, Francis B. (Dartmouth Coll., Hanover, N. H.) *The family in American culture*. New York: Prentice-Hall, 1947. xii, 780 p. \$5.00.—The family is, on the one hand, a product of a long history of Western European and American cultural factors, and, on the other, is the current social institution which has perhaps the greatest influence on the personality development of the individual. In this textbook the authors trace the formation of the American family as influenced by such cultural factors as religion, capitalism, romantic love, the law, and unique American traditions. In a second part the family as a social institution, including its numerical composition, its cultural and biological characteristics, and its economic and social functions is described. Part 3 is devoted to the internal relationships of the family, with special emphasis on its importance in terms of personality adjustment and development, the behavioral aspects of parent-child relationships, and the adjustment problems of courtship and marriage. In a final section the problems of the family and social change, including personal and social conflicts within the family, the matters of desertion and divorce, and the reorganization of the family are considered. In a final chapter the authors discuss possible futures of the American family.—C. M. Louttit.

2126. Williams, Benjamin H. *Public opinion in a world of power politics. Publ. Opin. Quart.*, 1947, 11, 361-366.—People may be placed in 3 classes with regard to the intensity of their feelings with which they support a principle. The "acquiescent" group gives verbal affirmation; the "exhortatory" group gives rhetorical support, speaking or writing to convince others; and the "sacrificial" group willing to make sacrifices for the principle." Polls should measure the intensity of feeling in support of a principle, where world politics are concerned. More research should be done on the correlation between verbal affirmation and willingness to act. In today's world the strength or weakness of sacrificial loyalties has assumed a new importance.—H. F. Rothe.

LANGUAGE & COMMUNICATION

2127. Moore, Jean K. (Iowa State Coll., Ames.) Speech content of selected groups of orphanage and non-orphanage preschool children. *J. exp. Educ.*, 1947, 16, 122-133.—In this investigation the speech content of 11 orphanage and 40 non-orphanage preschool children was studied on the basis of Smith-Williams Vocabulary Test scores and 15, two-minute samples of each child's spontaneous speech. Regression equations in which CA and MA were held constant were used to predict achievement of both groups in each analysis of the data—non-orphanage children were superior in all the analyses. In an analysis of variance the difference between the 2 groups due to environment was statistically significant for the vocabulary and the speech content scores. All of the differences were in favor of the non-orphanage group. Suggestions for improving orphanage environments are made.—G. G. Thompson.

2128. Révész, G. (U. Amsterdam, Holland.) Origine e preistoria del linguaggio. (Origin and prehistoric development of language.) *Arch. Psicol. Neural. Psichiat.*, 1947, 8, 3-15.—This is a short presentation of the content of the author's book on the origin of language (*Ursprung und Vorgeschichte der Sprachen*, Bern, 1946). Biological and anthropological theories concerning the development of language are discussed. The theory is based on the principle that the vital need for contact explains the development of language as a psycho-biological phenomenon. Only mental contact, which involves exchange of ideas, requires the use of language, while understanding and communication of emotions (psychic contact) may take place without verbal expression. Both psychological and historical data support the theory.—R. Calabresi.

2129. Taylor, Calvin W. (U. Chicago, Ill.) A factorial study of fluency in writing. *Psychometrika*, 1947, 12, 239-262.—A factorial study of fluency was undertaken to test an hypothesis that at least 2 fluency abilities would be measured by a battery composed both of word fluency tests used by Thurstone and tests of fluency described by several British investigators. 28 tests, including 10 reference tests for 5 primary mental abilities, were administered to 181 high-school seniors. 10 centroid factors were extracted, a simple structure was found, and 8 factors were interpreted. 5 factors defined were the following reference abilities: Memory (M), number (N), reasoning (R), verbal comprehension (V), and perceptual speed (P), the last one being somewhat tentatively identified. The main finding is the analysis of fluency into 2 factors: word fluency (W) and ideational fluency (F). Word fluency is defined as a facility in producing single, isolated words that contain one or more formal restrictions, without reference to the meaning of the words. Ideational fluency is described as a facility in expressing ideas by the use of words and their meanings. Another verbal ability indicated is tentatively interpreted as verbal versatility, the ability to ex-

press essentially the same idea by means of several different words or combinations of words.—(Courtesy of *Psychometrika*.)

2130. Vandel, A. Le langage animal. (Animal language.) *J. Psychol. norm. path.*, 1947, 40, 129-153.—A review of methods of communication characteristic of insects and mammals leads the author to conclude that, notwithstanding the capacity of various species to imitate or understand human sounds, to make rudimentary generalizations and even to deal adequately with symbols, no psychic function demonstrates more clearly than does language the wide gulf which separates man intellectually from the lower animals. The *Rundtans* and *Schwänzeltans* by which the foraging bee alerts the swarm to different kinds of food, and the antennal language by which, probably, a predatory column of ants is guided infallibly to its objective can be regarded as signals with the power to arouse tensions which the swarm resolves by instinctive behavior. The cries of higher animals also partake of this primitive affective quality even in those species that demonstrate great variety of expression. But animal sounds remain tied to affectivity, to action, and to the present, whereas human language, by virtue of man's ability to imagine the future, is freed from complete dependence on the present. Inhibition of the immediate affective and reactive tendencies makes it possible for words to become pure concepts representing objective facts rather than the expression of internal feeling states. 18 references.—M. Sheehan.

[See also abstracts 1946, 2097, 2302, 2311, 2377, 2379, 2383.]

SOCIAL ACTION

2131. Cole, Mrs. Charley Tidd. Rural leadership—its origin and development. *J. educ. Sociol.*, 1947, 21, 184-188.—Rural leadership is indigenous and democratic; it arises in small communities around common interests; it develops as the common interest widens into group leadership for communities of expanded size and interests. As a part of the group, the individual leader becomes an effective spokesman for his own group and an interpretative agent for other related programs. An example of effective group leadership is the county-wide committees of the Save the Children Federation.—H. A. Gibbard.

2132. Glover, Edward. War, sadism and pacifism. London: George Allen and Unwin Ltd., 1946. 292 p. \$2.75.—By means of psychoanalytical concepts, individual sado-masochistic tendencies are projected and translated into terms of group activities during peace and war. The psychological mechanisms of frustration, repression, and projection are evaluated in terms of their relationships to the conscious and unconscious activities promoting war and peace. Certain principles of war prevention are set forth based on individual and group activities. The rationalizations used as basic reasons for war ex-

posed through analysis of the individual's fundamental learnings toward sadism and/or masochism. A long-term program of research is outlined to provide civilization with information to combat the practice of war and to protect itself against recurring war. Individual psychological disorders are examined, the conclusion being drawn that a repression of infantile sex impulses results in a confusion between real adult dangers and the dangers attendant to infantile loving. A plea is registered for examining the primitive factors of man's nature through an analysis of early human development. The study of war-neuroses is suggested for beginning a study of war psychology together with an understanding of aim-inhibition and sublimation. Until we understand the unconscious causes of war we can not prescribe for a lasting peace.—*J. W. Hancock.*

2133. Schreiber, Julius. *Doing something about prejudice.* *Surv. Graph.*, 1948, 37, 54-57.—Prejudice, racial or otherwise, is a symptom of an underlying personality disturbance and as such it resists efforts to change because of the individual's psychological need of some type of support. The development of prejudice, instead of some other type of defense, results from the family and community attitudes as the child is growing up. The author suggests the following as elements in an action program against prejudice: research, education, legislation, insightful action against the demagogues, joint participation by members of majority and minority groups on common problems, and action on such social issues as housing, employment, etc.—*C. M. Louttit.*

2134. Stein, Abe B. (*New York U.*) *Adolescent participation in community co-ordinating councils.* *J. educ. Sociol.*, 1947, 21, 177-183.—Adolescents must be recognized as capable of sharing responsibility for the affairs of their communities. The nature and functions of good community councils are presented. Their memberships should include youths. Schools could offer "community affairs" courses to aid in youths' participation; an example is given. Participating youth are not to be treated as subordinate. The entire student group should participate in some way.—*H. A. Gibbard.*

[See also abstract 2379.]

CLINICAL PSYCHOLOGY, GUIDANCE, COUNSELING

2135. Binger, Carl. *Psychiatry for the millions.* *Cincinnati J. Med.*, 1947, 28, 802-822.—The teaching of psychiatry in the medical schools and to practicing physicians is discussed. Of 46 departments of psychiatry in the medical schools, 20 are considered adequate. Only 24 schools have one or more full time instructors. 50 to 75 qualified psychiatrists are turned out a year, while the minimum requirement for institutional work is 6,000 to 7,000, while an additional 20,000 to 30,000 analytically trained psychiatrists could be absorbed. The reasons for the shortage are discussed.—*G. W. Knox.*

2136. Hamrin, S. A. (*Northwestern U., Evanston, Ill.*) *Improving guidance and personnel services through research studies.* In Hamrin, S. A., & Endicott, F. S., *Improving guidance and personnel services through research*, 7-14. (see 22: 2137)—29 doctoral researches made at Northwestern University School of Education in the period 1928-1946, all dealing directly with some aspect of guidance and personnel work are briefly referred to by the writer. These researches touched upon the development, administration, and application of guidance programs, and with the content of guidance and characteristics of various counselee groups and of counselors. 6 areas of guidance and personnel work are delineated in which a great need for further research is seen. They are (1) the development and improvement of techniques (such as tests) to help pupils to be understood; (2) the field of occupational information, including methods of organizing and teaching such information, and testing knowledge of it; (3) individual counseling, including the respective merits of directive and non-directive techniques, and the values of counseling; (4) the area of administration of guidance services; (5) the problems related to the social development of the individual, the value of student activities, the measurement of social growth; (6) the problems of the relationship of guidance to other supplementary school services.—*P. Ash.*

2137. Hamrin, S. A., & Endicott, Frank S. [Eds.] (*Northwestern U., Evanston, Ill.*) *Improving guidance and personnel services through research; a report of the Tenth Annual Conference on guidance and personnel work held at Northwestern University July 18, 19, 20, 1946.* Evanston, Illinois: School of Education, Northwestern University, 1946. 123 p.—The participants in the Tenth Annual Conference on Guidance and Personnel (held in 1946) "were asked to prepare their papers in such a fashion that the findings of their research studies might help to improve guidance and personnel practices." A total of eleven papers was given, including contributions relevant to occupational research and occupational classification, counseling in high school, college and industry, and attitudes and adjustment of various specific groups. The principal theme of the papers is an analysis of the contributions of research to guidance and personnel practices, and an exploration of those areas in which further research is needed. The papers are abstracted in this issue: Hamrin (2136), Pring (2323), Young (2331), Stout (2324), O'Brien (2216), Michelman (2202), Peebles (2322), Finger (2307), Grover (2320), Vernon (2363), Schloerb (2204).—*P. Ash.*

2138. Johnson, Paul E. (*Boston U., Sch. Theology, Boston, Mass.*) *Clinical education of the pastor.* *Christian Educ.*, 1947, 30, 103-108.—The values in the training of clergymen of spending a period in a hospital are pointed out. There is some description of such clinical programs in several different hospitals.—*C. M. Louttit.*

2139. Levy, David M. (*Columbia U., New York.*) *New fields of psychiatry.* New York: W. W. Norton,

1947. 171 p. \$2.75.—This non-technical survey of psychiatric activities is taken from the authors' Salmon Memorial Lectures and is in large part based on areas wherein he has had personal experience. Sections dealing with child guidance, delinquency and criminology describe the early growth of these movements in Chicago. Short chapters are devoted to social work and educational and industrial psychiatry. The last half of the book discusses various aspects of military psychiatry, induction center activities, personnel selection, and political psychiatry. A sample case history in political psychiatry illustrates the methods of study and evaluation used by the Screening Center in Germany to detect Nazi ideologies in persons being selected to fill governmental and other posts. There is emphasis on the supplementary and complementary interaction of psychologist and psychiatrist working together on all these problems. 83-item bibliography.—C. E. Henry.

2140. Soddy, Kenneth. (National Council Mental Health, London, Eng.) Some lessons of wartime psychiatry. I. *Ment. Hlth, Lond.*, 1946, 6, 30-35.—Some of the lessons learned by psychiatrists serving in the English military during the war are reviewed. Sound mental hygiene in an army necessitates: (1) belief in the justice of the cause; (2) belief in the soundness of the higher leadership; (3) efficient primary selection to exclude the mentally unfit; (4) planned placing of men in roles for which they are suited; (5) efficient training methods and the inculcation of group feeling; (6) careful, skilled and considerate officers; (7) planned indoctrination and up to date dissemination of information. How England approached some of these problems is described. For example, it was found that the mentally dull, who interfered with morale and efficiency when grouped with normal soldiers, had much to contribute when they were placed in a separate corps whose main function was laboring. The paper is concluded in the following issue of the journal (see 22: 1637).—M. E. Wright.

2141. Sullivan, Harry Stack. Notes on investigation, therapy, and education in psychiatry and their relations to schizophrenia. *Psychiatry*, 1947, 10, 271-280.—Psychiatry as a science, an art, and a technology is concerned with the science of living in all of its ramifications. There needs to be a development of new applications to permit an adequate understanding of human behavior as the performance of a person among persons. Research should be directed toward all sources of possible information. The problems of schizophrenia offer an excellent field for learning in the ways of human behavior. Therapy is as yet an unsolved problem. Even the training of psychiatrists is too little formulated. A more adequate type of training could develop from an intensive program of supervisory instruction in the discharge of all psychiatric duties.—M. H. Erickson.

2142. Sullivan, Harry Stack. (William Alanson White Psychiatric Found., Washington, D. C.)

Remobilization for enduring peace and social progress. *Psychiatry*, 1947, 10, 239-252.—An account is given of the need for the world-wide mobilization of psychiatry, the current status and objectives of the World Health Organization and discussion is given of some of the problems confronting this movement.—M. H. Erickson.

2143. Wallis, J. H. The contribution of Alfred Adler to mental health. *Ment. Hlth, Lond.*, 1947, 7, 12-13.—Alfred Adler's basic formulations of the unity of the personality, the individual's "Gemeinschaftsgefühl"—his willingness to cooperate with others and to contribute to their well-being—and the "scheme of apperception" which guides an individual's behavior are the fundamental building blocks of mental health. Dr. Adler's insistence upon a teleological understanding of human nature emphasizes the close link between the problems of ethics and human adjustment.—M. E. Wright.

2144. Wright, H. Wilkes, & Darley, John G. (U. Minnesota, Minneapolis.) In counseling and guidance. *J. educ. Res.*, 1947, 41, 116-125.—A tremendous increase in the demand for counseling and guidance has taken place in recent years. This rapid expansion has influenced the field of guidance in emphasizing a more dynamic approach to the individual, taking it out of the confines of the educational system, and making it a professional field in its own right. The greatest needs in counseling are for better and for additional measuring instruments to assess human behavior and adjustment, for improved diagnostic structuring of maladjustments and deviations, and for increased knowledge of available means of therapy. The demand for counseling personnel exceeds the supply of adequately trained workers. While an extensive literature on counseling is developing a survey of this literature reveals that little of it is based on research. 29 references.—M. Murphy.

[See also abstracts 1924, 1927, 2207, 2385.]

METHODOLOGY, TECHNIQUES

2145. American Prison Association. Handbook on classification in correctional institutions. New York: American Prison Association, 1947. viii, 88 p.—This handbook on correctional classification was prepared to describe the advantages of classification in prisons, its method of operation, and to clarify certain prevalent misconceptions. Individual chapters treat classification on reception, admission, and subsequent to admission. The typical personnel upon whom the function of classification should fall are described and all of the material is grounded in a discussion of the basic principles of classification. A selected bibliography on classification covering the period 1920-1945 is included.—A. Burton.

2146. Anderson, Rose G. (Psychological Corporation, New York.) Abbreviated forms of the Bernreuter Personality Inventory. *J. consult. Psychol.*, 1947, 11, 310-314.—100 Inventories were scored by 2 methods: a short weighted, and a short

unweighted method. The short unweighted method yielded scores which correlated highly with those obtained by the standard complicated method. There is evidence that "the refinement implied in the elaborate Bernreuter scoring procedure and in the large number of items is apparent rather than real."—S. G. Dulsky.

2147. Ballin, Marian R. Improving the reliability of guidance. *Calif. J. second Educ.*, 1947, 22, 432-437.—Consistency is offered as an important factor in the effectiveness of counseling. Intercounselor differences were investigated by making an analysis of the tests assigned and the final vocational objectives selected. 50 cases from each of 6 counselors were studied. The group had roughly equivalent distributions in age, service rank, and education. Many significant differences were found in the frequencies with which counselors assigned various tests. However, there was less intercounselor variation in the occupational levels of the final vocational objectives.—G. C. Carter.

2148. Dayhaw, Lawrence T. (U. Ottawa, Canada.) What do psychological tests measure? *Rev. Univ. Ottawa*, 1947, 17, 230-247.—Eleven variations in the concept of validity are reviewed and the methods of assessing the validity of intelligence, achievement, and personality tests evaluated. Distinguished are 22 item validity methods. Factors which affect test validity are summarized.—W. L. Wilkins.

2149. Drake, Lewis E. (U. Wisconsin, Madison.) A method for machine scoring the card form of the MMPI. *J. educ. Res.*, 1947, 41, 139-141.—A method is described which has been in use for two years and which has been used to score nearly 3000 inventories. It has an advantage over other quick scoring methods in that the responses of the client are preserved for item analysis or for counseling.—M. Murphy.

2150. Edgerton, Harold A. (Ohio State U., Columbus.) Britt, Stuart Henderson, & Lemmon, William B. Reliability of anecdotal material in the first annual Science Talent Search. *J. appl. Psychol.*, 1947, 31, 413-424.—The third hurdle in the selection of winners of scholarships in the Science Talent Search are the personal recommendations by teachers, which are anecdotal in form. When 25 raters evaluated 50 recommendations, the estimated reliabilities of the total rating scores ranged from .50 to .86. Reliability estimates of the 10 individual categories on the recommendation blank showed coefficients ranging from .36 to .87. The highest correlation coefficient for boys or girls between the recommendation blank and 2 of the other hurdles—the Science Aptitude Examination and rank in high school class—was .21.—C. G. Browne.

2151. Ellis, Albert. A comparison of the use of direct and indirect phrasing in personality questionnaires. *Psychol. Monogr.* 1947, 61, iv, 41 p.—The effects of using direct and indirect phrasing in personality questionnaires are experimentally studied on 40 behavior problem boys and 221 non-problem boys from regular seventh and eighth grade classes

of 3 New York City junior high schools. Ellis offers the hypothesis that "if conventional personality test schedules employing direct questions, as well as indirect test forms derived from the direct items are given in a battery to a single group of behavioral problem and a group of non-problem school children: (a) the indirect test scores will be significantly different from the direct scores; (b) groups of behavior problem and non-problem children will react differently to the indirect and direct tests; and (c) presentation of the questions in three different orders—an indirect-direct, an alternate, and a direct-indirect order—will have a distinct effect on the degree of test sophistication shown by the children in their responses." The results of the experiment substantially support this hypothesis although it is recognized that the significance of the study is limited by the small group of problem children included.—M. A. Seidenfeld.

2152. Hathaway, Starke R. (U. Minnesota, Minneapolis.) A coding system for MMPI profile classification. *J. consult. Psychol.*, 1947, 11, 334-337.—An MMPI profile coding system that provides an approach to pattern-intensity analysis is presented. The coded profiles may be indexed and filed. The file provides an immediate reference for profile elevation and shape frequencies among given classes of subjects.—S. G. Dulsky.

2153. Lipsett, Laurence, & Smith, Leo F. (Rochester (N. Y.) Inst. Technology.) The Rochester Veterans' Guidance Center takes stock. *Amer. Psychologist*, 1948, 3, 12-15.—A study was made of 200 cases of disabled veterans advised under Public Law 16. Six months after advisement 60% of these were still proceeding toward the objectives established. Of the 40% who changed objectives many did so for reasons which are not predictable from present guidance procedures. It appears from this study that the interviewing should be more complete and balanced; that guidance should be extended beyond one or two days in some cases, and that further follow-up information is necessary.—L. J. Timm.

2154. Long, Louis, & Hill, John. (City Coll. of New York.) Additional norms for the Purdue Pegboard. *Occupations*, 1947, 26, 160-161.—Additional norms for the Purdue Pegboard are presented, based on scores from 3 trial administrations to 456 men.—G. S. Speer.

2155. McCurdy, Harold Grier. (Meredith Coll., Raleigh, N. C.) Group and individual variability on the Goodenough Draw-a-Man Test. *J. educ. Psychol.*, 1947, 38, 428-436.—Successive Goodenough Draw-a-Man Test records of a group of first grade children and a large number of drawings made by one child over a period of 4 years formed the material on which this study was based. Results agree with prior work in showing considerable variation in a child's Goodenough scores when some time has elapsed between tests. There is evidence that this variation rests upon a periodic fluctuation of ability, a fluctuation which may affect Binet test

performance as well, although to a slighter degree.—*E. B. Mallory.*

2156. Mendel, Alfred O. *Personality in handwriting; a handbook of American graphology.* New York: Stephen Daye Press, 1947. 375 p. \$3.50.—There are 4 distinct points of view in this work. (1) The publisher tells us that it is "The first complete, systematized presentation of personality traits as revealed in handwriting . . . adapted to the needs of those whose work involves a broad knowledge of human relationships such as personnel managers, teachers, businessmen etc. . . . The author shows how graphology is in some respects more revealing than the Rorschach." (2) R. Arnheim, in a foreword, presents graphology as a projective technique. "brain writing which does not reveal the content of mental activity but the formal aspects of the driving forces." (3) The author presents "the traditional interpretations, the rules of thumb, the hunches, the speculations, the intuitions, (which) are needed for working hypotheses to guide the experimentalist in setting his problem" and which must be "accepted with a grain of salt. Graphology does not yet possess a clearly defined system." He leans heavily on Freud for an interpretation of motivation and symbolism with 19 "signposts" for arriving at diagnoses. (4) A. Kanfer in a 19 page appendix presents his cooperative effort with physicians to arrive at physical diagnoses.—*L. R. Steiner.*

2157. Ratcliffe, T. A. *The psychological problems of the returned ex-serviceman.* *Ment. Hlth, Lond.*, 1947, 7, 2-5.—The problem of readjustment of the serviceman to civilian life is as complex as the original break with that way of life and adjustment to the military services. It is a definite responsibility of the military unit to provide an orientation to the realities of the home situation, and not to the phantasies, idealized home, for each man during the period in which he is awaiting demobilization. The discussions and lectures must be based on specificities of domestic, economic, emotional and psychological problems rather than waste everyone's time with vague, generalized pep talks. Preferably the discussion leaders should be people who are intimately in contact with these home adjustment problems. On the home front there is an equal responsibility for educating the family, the employer and the man's intimate associates as to what they should expect. The need for affection and understanding is obvious, but less well appreciated is that all parties concerned should make haste very slowly and with great patience in the readjustment process.—*M. E. Wright.*

2158. Sisk, Henry L. (Stevenson, Jordan, and Harrison, Inc., Chicago, Ill.) *A reply to Winfield's study of the Multiple Choice Rorschach.* *J. appl. Psychol.*, 1947, 31, 446-448.—Winfield (see 21: 514) concluded that there is a lack of correspondence between the scores made on the Multiple Choice Rorschach and the Minnesota Multiphasic Personality Inventory. This conclusion is criticized because she failed to use the Lie score in the MMPI,

and investigation reveals that 81% of those with significant MCR scores had Lie scores above a T-score of 50, although they had no significant scores on the 8 major scales. Five cases of normal Lie scores on the MMPI and having significant MCR scores indicate a certain patterning on the MMPI characterized as being rather flat with the hypomania score elevated in relation to the rest of the profile.—*C. G. Browne.*

2159. Super, Donald E., Braasch, William F., Jr., & Shay, Joseph B. (Teachers Coll., Columbia U., New York.) *The effect of distractions on test results.* *J. educ. Psychol.*, 1947, 38, 373-377.—The Minnesota Vocational test for Clerical Workers and the Otis Quick Scoring Mental Ability Test (Gamma Am.), were given to 2 groups of graduate students. There were 26 in the control group which worked under normal conditions, and 30 in a group who were subjected to distractions such as breaking pencils, arguments in the hall, apparent mistiming of the test and interruptions by a poorly played trumpet. No statistically significant differences were found to result from the different test conditions. It appears that commonly occurring distractions do not affect test results.—*E. B. Mallory.*

2160. Wade, David. *The personality factors in counseling.* *J. Rehabil.*, 1947, 13, (6) 10-16.—The importance of personality factors in counseling is emphasized and some of the findings of Kretchmer and Rorschach are discussed. The author calls attention to the fact that the counselor should collect observations that will help him do the following: determine the mental status of the client, understand the client's method of approach, and uncover the use of any of the common mental defense mechanisms.—*L. Long.*

[See also abstracts 1939, 1945, 2030, 2067, 2321, 2324, 2363, 2386.]

DIAGNOSIS & EVALUATION

2161. Bobbitt, Joseph M., & Newman, Sidney H. (U.S. Coast Guard Acad., New London, Conn.) *Comparative hospital records of two groups differentiated by psychological tests.* *J. consult. Psychol.*, 1947, 11, 292-298.—The Navy Personal Inventory was the most important test in forming a group of 47 men (unsatisfactory group) and 52 men (satisfactory group). The subjects were Steward's Mate trainees. Members of the unsatisfactory group are more likely than are the members of the satisfactory group to visit the hospital for a variety of ill-defined symptomatic conditions, or for relatively minor health problems. The unsatisfactory group requests medical care for conditions that are secondary to emotional tension, insecurity, and feelings of inadequacy.—*S. G. Dulsky.*

2162. Horn, D. *An experimental study of the diagnostic process in the clinical investigation of personality.* In *Harvard University, Summaries of theses . . . 1943-1945.* Cambridge, 1947, 592-595.—Abstract of Ph.D. thesis.

2163. Mayman, Martin, & Rapaport, David. (Menninger Clinic, Topeka, Kans.) Diagnostic testing in convulsive disorders. In Hoch, P. H., & Knight, R. P., *Epilepsy*. (see 22: 2263) p. 123-135. —Diagnostic testing in convulsive disorders is in a state of uncertainty even greater, if possible, than the etiology and nosology of convulsive disorders. The state of affairs in this field can best be assessed by reviewing first the role of psychological testing in the so-called functional psychiatric disorders. In treating the overall problem, the authors evaluate studies concerned with 3 important questions: (1) To what extent do we find mental impairment accompanying convulsive disorders, (2) how may the "deterioration" which has been reported be accounted for, and (3) is there a specific pattern of impairments characterizing convulsive conditions. Recommendations are made for the direction of future research. 44-item bibliography.—R. D. Weits.

2164. Stogdill, Ralph M. (Bureau of Juvenile Research, Columbus, O.) *The Behavior Cards*. (2nd ed.) Columbus, O.: H. L. Hedrick, 1947 18 p.—Use of behavior cards as a test-interview for delinquent children is described. The card method was found to be more reliable and valid than a mimeograph list of the same items. Standardization is described in some detail. Several tables comparing delinquent boys, delinquent girls, normal boys, and boy scouts are included. The 150 items are reduced to an abbreviated form of 100 of the least serious items for cases in which it seemed inadvisable to question the child about some of the more violent delinquencies. Evidences of validity include total score, item score, internal consistency and item validity. (see 16: 2396).—G. C. Carter.

2165. Wartenberg, Robert. The Babinski reflex after 50 years. *J. Amer. med. Ass.*, 1947, 135, 763-767.—The significance of the Babinski reflex and its historical effect on medical diagnosis since its discovery are described.—C. M. Louttit.

2166. Wayne, David M., Adams, M., & Rowe, Lillian A. A study of military prisoners at a disciplinary barracks suspected of homosexual activities. *Milit. Surg.*, 1947, 101, 499-504.—From 1,765 inmates of a disciplinary barracks an experimental group (consisting of those known to have manifested homosexual behavior) and a control group (consisting of an equal number of non-homosexuals picked at random) were administered the Bender Gestalt Test, the Abbreviated Thematic Apperception Test, and the modified group Rorschach Test. Some significant differences were found. The Bender-Gestalt Test tends to show sex conflicts but not the nature of the conflict. The Thematic Apperception Test proved uncertain in identifying homosexuals. The Modified Group Rorschach Test protocols revealed only about 9% of the sexual deviates.—G. W. Knox.

2167. Wenger, M. A. (U. California, Los Angeles.) Preliminary study of the significance of measures of autonomic balance. *Psychosom. Med.*,

1947, 9, 301-309.—Two small groups of children 6 to 13 years of age selected because of extreme autonomic scores were compared for 43 variables, e.g., behavior picture, school ratings, mother's personality, home environment, I.Q., basal metabolic rate, enuresis, adequate diet, and systolic blood pressure. The hypothesis being investigated was that indices of autonomic balance representing the interaction of the parasympathetic and sympathetic branches of the autonomic n.s. are related to emotional and personal-social behavior. Differences, although statistically insignificant, were generally revealed in the direction predicted on the basis of parasympathetic or sympathetic predominance. Generally, the findings indicated a genetic and physiological basis for certain personality characteristics and that "relationships of autonomic balance to behavioral and home environment variables are interpreted as sequelae to basic physiologic patterns." 16 references.—P. S. de Q. Cabot.

[See also abstracts 2261, 2272.]

TREATMENT METHODS

2168. Aitken, A. N. (Niagara Sanatorium, Lockport, N. Y.) The institutional phase of rehabilitation. *J. Rehabil.*, 1947, 13, (6) 3-9.—The rehabilitation program discussed by the author is based entirely on experience in a tuberculosis hospital. The various phases of treatment are described and the type of activities permitted in each is presented. Throughout the discussion the part played by each of the specialists in rehabilitation work is discussed and an organizational chart of one sanatorium is included in the article.—L. Long.

2169. Alexander, Franz. (Instit. Psychoanalysis, Chicago, Ill.) Treatment of a case of peptic ulcer and personality disorder. *Psychosom. Med.*, 1947, 9, 321-330.—Clinical observations are reported on the treatment of a 23 year old university student suffering from duodenal ulcer and deep seated personality disturbances. 36 sessions over a 10 month period were held with brief psychotherapy substituted for the more regular psychoanalytic techniques. Symptomatology and a complete anamnesis are given with a discussion of the dynamics involved together with a running account of progress during interviews where, as a guiding principle, the patient was prevented as much as possible from more regressive gratifications in a dependence transference relationship. The author is convinced that had psychoanalytic procedures been followed, recovery would have been delayed.—P. S. de Q. Cabot.

2170. Bernheim, H. *Suggestive therapeutics: a treatise on the nature and uses of hypnotism*. New York: London Book Company, 1947. xvi, 420 p. \$5.00.—This classic in psychotherapy has been reprinted from the original American edition of 1889, translated by Christian A. Herter from the second revised French edition.—C. M. Louttit.

2171. Borzunova, A. S. Treatment of neuroses associated with trauma of the brain. *Amer. Rev.*,

Soviet Med., 1948, 5, 37-40.—Various methods are reviewed for the treatment of hysterical symptom complexes such as reactive mutism, aphonia and deaf-mutism. "It is recommended that one or two doses of 10cc of 33 percent alcohol be given intravenously in traumatic encephalopathy and hysterical reactions accompanied by the indicated symptom complexes . . . the treatment is free of danger and is preferred to narcosis with ether or to electric shock therapy."—L. C. Mead.

2172. Brenman, Margaret, & Gill, Merton M. (*Menninger Foundation, Topeka, Kans.*) *Hypnotherapy; a survey of the literature*. New York: International Universities Press, 1947. xi, 276 p. \$4.50.—Extending the original volume published in 1944 the authors have included an experimental investigation on "The Use of Hypnotic Techniques in a Study of Tension Systems" (Margaret Brenman) and a report on "Four Case Studies" which includes case material on results obtained with hypnotherapy in an anxiety hysteria, in mental illness in the aged, "some techniques of Hypnoanalysis," and "self-starvation and compulsive hopping with paradoxical reaction to hypnosis." These studies are in addition to the material on "The Historical Development of Hypnotherapy," chapters on methodology of induction and termination of hypnosis, susceptibility, therapeutic applications and the theory of hypnosis, all of which were in the earlier volume published by The Josiah Macy, Jr. Foundation. 363-item bibliography.—M. A. Seidenfeld.

2173. Green, Ray B. *Music in Veterans Hospitals. Music Educators J.*, 1947, 34, 22-24.—The Chief of Music of the Veterans Administration describes the use of music in the Veterans Hospitals.—P. R. Farnsworth.

2174. Hart, Ruth Gilbertson. *Relationship therapy in a children's psychiatric ward. Amer. J. Psychiat.*, 1947, 104, 132-134.—A progress report is presented concerning a 7-year old, feeble-minded and epileptic boy whose unruly behavior made hospital treatment difficult. The role of the psychiatric nurse and her non-professional associates, in assisting the boy toward a more wholesome adjustment, is described. Attention is called to the need for directing therapy to the emotional needs of the patient.—R. D. Weitz.

2175. Ingle, Dana L. (*Family and Children's Agency, San Francisco, Calif.*) *Family casework services for adolescents. J. soc. Casework*, 1947, 28, 349-353.—Casework services should offer the adolescent a secure relationship with an adult who understands the fundamental changes and conflicts aroused in adolescence. Treatment should take into account the maturation process and offer services of a concrete nature, such as vocational counseling, medical, recreational and other community resources which would help the adolescent in his period of transition and point out his potentialities for managing his own life.—V. M. Stark.

2176. Johnson, Paul E. (*Boston U. Sch. Theology, Boston, Mass.*) *Methods of pastoral counsel-*

ing. J. Pastoral Care, 1947, 1,(1), [6 p.].—The common methods of counseling used by the clergy, such as exhortation, persuasion, ordering, and forbidding are outmoded and not very successful. The author describes non-directive counseling methods but feels that these place too much responsibility on the client. He proposes a method of responsive counseling, which allows the client the opportunity for talking through his problem as does nondirective counseling. However, he proposes that the counselor enter into the situation with empathic understanding and accepting responses to the counselee's story.—C. M. Louttit.

2177. Jonquet, Eugene. (*U. Washington, Seattle.*) *Family casework services for young children. J. soc. Casework*, 1947, 28, 342-349.—The trend most needed in the social casework service for children is seen to be in the direction of a clearer and firmer orientation to the normal in the growth and development of the child and to the potentialities of the family for the nurture and guidance of normal growth. To be most effective, treatment should include both direct play procedure with the children as well as casework with the parents.—V. M. Stark.

2178. Kessler, Henry Howard. *Rehabilitation of the physically handicapped*. New York: Columbia University Press, 1947, x, 274 p. \$3.50.—Based upon a rich military as well as an extended civilian experience in the problems of the physically handicapped, Kessler has dealt with the principles and practices of rehabilitation as applied to the mentally and emotionally disabled, orthopedically handicapped, the blind, deaf, and medical and surgical invalids. He points out the role of physical restoration, the use of rehabilitation center concept and emphasizes the part which vocational guidance and training followed by selective placement can play in returning the disabled to effective living. Included is a section giving perspective in the national character of this problem and emphasizes its challenge to those who believe in human conservation.—M. A. Seidenfeld.

2179. Kriegbaum, Hillier. *Rehabilitation by self-help. Surv. Graph.*, 1948, 37, 15-18; 36.—The author reports on his observations of the VA Mental Hygiene Clinic in New York City and especially its use of group therapy in dealing with the adjustmental problems of veterans. The part played by clinical psychologists in this program is emphasized.—C. M. Louttit.

2180. Malamud, Daniel. *The counselor says "M-hm." Sci. Mon., N. Y.*, 1948, 66, 145-148.—A description is given of the non-directive approach to therapy with illustrative sample situations. A brief evaluation is included of this method.—E. Girden.

2181. Masserman, Jules H., & Jacques, Mary Grier. (*Northwestern U., Sch. Med., Chicago, Ill.*) *Effects of cerebral electroshock on experimental neuroses in cats. Amer. J. Psychiat.*, 1947, 104, 92-99.—Six cats were made experimentally neurotic

and were then subjected to cerebral electroshocks comparable to those used in clinical therapy. All of these animals showed a marked disintegration of inhibitions, phobias, compulsions and other neurotic patterns, with emergence of simpler, more normally readaptive behavior which could be further improved by guidance, retraining, and other corrective procedures. However, all of the neurotic animals and 2 normal controls subjected to the electroshocks also showed an impaired capacity for complex adaptations, with subsequent recovery in only 2 of the animals. In no case, however, could these deficits be correlated with corresponding histopathologic changes in the brain. The significance of these observations in relation to the clinical use of shock therapy is briefly discussed. 42-item bibliography.—R. D. Weitz.

2182. Moreno, J. L. (Beacon, N. Y.) Discussion of Snyder's "The present status of psychotherapeutic counseling." *Psychol. Bull.*, 1947, 44, 564-567.—The writer discusses some comments by Snyder on psychoanalysis and psychodrama in his recent paper (see 22: 327). Particular emphasis is placed on the treatment of psychodramatic counseling by Snyder, and an explanation of this procedure is given.—S. Ross.

2183. Rickles, N. K. Electroshock therapy; a survey of 200 cases treated over a 1 to 5 year period in a private sanatorium. *Amer. J. Psychiat.*, 1947, 104, 52-55.—It is suggested that the total approach to the treatment of the acute psychotic should embody not only the active phase of the treatment, with a complete physical and laboratory study, but a thorough study of the patient in relation to his environment. Important in such a program is an intimate understanding of the personalities of the entire family group, a human yet scientific approach, and a personalized service adaptable to the individual and his family. A 5-year follow-up program on 200 cases showed that the recovery rate under this procedure has been extremely high and has been maintained over a period of 1 to 5 years in 80% of the cases.—R. D. Weitz.

2184. Slavson, S. R. An elementaristic approach to the understanding and treatment of delinquency. *Nerv. Child.*, 1947, 6, 413-423.—The use of "delinquent" and "delinquency" as descriptive terms is misleading. The phenomenon indicated by these terms must be dealt with in relation to the individual. Therapy in treatment must be planned in accordance with clinical facts established in advance. Thorough understanding of the prospective candidate for group therapy is essential, as delinquents with psychopathic personality structure do not respond to group treatment.—G. S. Speer.

2185. Stone, Leo. Transference sleep in a neurosis with duodenal ulcer. *Int. J. Psycho-Anal.*, 1947, 28, 18-32.—Ten months after entering into analysis for a neurosis associated with duodenal ulcer, the patient, a 40-year-old man, developed a symptomatic reaction of extreme intensity that persisted for most of his 776 analytic hours. This reaction was that of

transference sleep, manifested whenever the analyst spoke. The analysis was twice interrupted by the patient. Discussion is given of the dynamics of the patient's problems and of his recovery. 22-item bibliography.—M. H. Erickson.

2186. Strauss, Alfred A. (Northville, Mich.) Therapeutic pedagogy; a neuropsychiatric approach in special education. *Amer. J. Psychiat.*, 1947, 104, 60-63.—Therapeutic pedagogy, additional specified training in the field of basic academic learning, is discussed. Although the methods have helped only a relatively small number of the total group of exceptional children, there are indications that more intensive investigation and research would enlarge this group by including many children of the so-called maladjusted, neurotic, or psychopathic type. Therapeutic pedagogy comprises all methods which have as their goal a rehabilitation and harmonious development of capacities and aptitudes, physical as well as mental, of children and adolescents, crippled, blind, deaf, feeble-minded and psychopathic, from the point of view of establishing the necessary social habits which society at large expects.—R. D. Weitz.

2187. Tower, Sarah S. (14 E. Biddle St., Baltimore, Md.) Management of paranoid trends in treatment of a post-psychotic obsessional condition. *Psychiatry*, 1947, 10, 137-141.—During the first part of 2 years of analysis, the therapist tended to aid the patient, who was an obsessionally defended person with a history of a frank brief paranoid psychosis, in his communications during the treatment hour. This wooing or winning of the patient's confidences served only to intensify the patient's difficulties. When the therapist reversed his attitude and assumed a rigidly professional attitude, and responded only to genuinely simple real feeling on the part of the patient, a genuine physician-patient relationship was established, which enabled the patient to make progressive therapeutic progress.—M. H. Erickson.

2188. Wilcox, Paul H. (Traverse City (Mich.) State Hosp.) Electroshock therapy; a review of over 23,000 treatments using unidirectional currents. *Amer. J. Psychiat.*, 1947, 104, 100-112.—R. D. Weitz.

[See also abstracts 2210, 2229, 2230, 2231, 2243, 2245, 2247, 2260, 2269.]

CHILD GUIDANCE

2189. Fornwalt, Russell J. (Big Brother Movement, New York.) Part-time job values for the maladjusted boy. *Occupations*, 1948, 26, 221-223.—This is a brief description of the work of the Big Brothers in helping maladjusted boys, and of the value of properly selected part-time work in its development of many such boys.—G. S. Speer.

2190. Glanzmann, E. (Universitätskinderklinik, Jennerspital, Bern, Switzerland.) Plurielles Schmolten (Affektretention) bei Kindern. (Mani-

fold expressions of sulkiness by children.) *Z. Kinderpsychiat.*, 1947, 14, 48-53.—Various forms of neurotic sulkiness have been observed in children admitted to the hospital. These reactions disappear as soon as the child has for some time been removed from a domestic environment full of conflicts. Glanzmann exemplifies 3 manifestations of this kind with case studies: (1) mutism; (2) voluntary retention of feces, resulting in maximal constipation with subsequent encopresis; (3) voluntary retention of urine, resulting in an overfull bladder with subsequent enuresis. Such types of behavior have been observed in asthenic sensitive children whose psychophysical constitution favors an introverted attitude.—*R. Lassner.*

2191. *Jensen, Reynold A.* (*U. Minnesota, Minneapolis.*) The importance of the emotional factor in the convulsive disorders of children; (a preliminary report.) *Amer. J. Psychiat.*, 1947, 104, 126-131.—One of the most important findings which has emerged from researches on the convulsive disorders is the multiplicity of causes. Among the many mentioned are the disturbed emotional states. To examine more closely the influence of the emotional factor, the author studied intensively 22 cases of convulsive disorder. He concludes that if every physician dealing with the convulsive disorders of all ranges, but particularly children, could be encouraged to deal constructively with the situational and emotional factors early in each case, much could be done to ease the subsequent care of these patients and their families.—*R. D. Weitz.*

2192. *Strauss, Alfred A., & Lehtinen, Laura E.* (*Cove Schools, Racine, Wis.*) Psychopathology and education of the brain-injured child. New York: Grune & Stratton, 1947. 206 p. \$5.00.—The 2 parts of this 12-chapter research monograph, summarizing as they do 20 years of study and experience, provide, first, a review of the neuroanatomical, experimental, and clinical literature, and, next, a descriptive analysis of the authors' investigations in the behavior anomalies and educational problems posed by brain-injured children. By means of specially devised test-situations and by qualitative and quantitative analyses of the performances exhibited by control and experimental children the reactions of the brain-injured are characterized in the fields of perceptual and symbolic activity, in social behavior. These findings are then related to the development and use of improved, practical techniques in clinical testing, in teaching arithmetic, reading, and writing.—*L. A. Pennington.*

2193. *Sukhareva, G. E.* (*Children's Clinic, Central Institute of Psychiatry, Ministry of Health, U.S.S.R.*) Psychologic disturbances in children during war. *Amer. Rev. Soviet Med.*, 1948, 5, 32-37.—This paper is a report on the nature and extent of the increase in neuro-psychiatric diseases in children during war. 858 case histories for the year 1943 are reviewed. The most frequent of the psychiatric conditions were the "reactive status" whose etiology and symptoms are described. A feature of the war-

time psychoses was the striking uniformity of the clinical manifestations.—*L. C. Mead.*

[See also abstracts 2174, 2224, 2226, 2230, 2244, 2257, 2275, 2284.]

VOCATIONAL GUIDANCE

2194. *Boykin, Leander L.* (*Southern U., Baton Rouge, La.*) How can we improve the vocational education and guidance of Negro youth? *Occupations*, 1947, 26, 165-170.—The 3 major needs in the improvement of vocational guidance for Negro youth are: (1) the expansion and development of training facilities, particularly in the industrial arts; (2) the training of women for occupations other than domestic service; and (3) occupational data in terms of opportunities, needs, and trends in relation to Negroes.—*G. S. Speer.*

2195. *Condon, Margaret E.* (*City Coll., New York.*) A follow-up study of one hundred veterans counseled at the City College Veterans Administration Vocational Advisement Unit. *J. Rehabil.*, 1947, 13, (6) 27-31; 36.—"The purpose of the follow-up study of one hundred veterans who entered on-the-job training was to find the number who successfully completed training and the cause of non-completion of training on the part of others." Of the 100 veterans, 9 completed enough of their training to be considered rehabilitated, 39 were still in training, 43 discontinued their training program, and 9 were waiting for Veterans Administration to find a training facility. The reasons why the 43 veterans discontinued their training programs are discussed.—*L. Long.*

2196. *Edmiston, R. W., & Starr, C. H.* (*Miami U., Oxford, O.*) Youth's attitudes toward occupations. *Occupations*, 1948, 26, 213-320.—A questionnaire covering 27 factors which might affect choice of vocation was marked by 443 boys and 575 girls in grades 7 through 12. True differences between the indices of boys and girls showed that girls were more willing, etc. Boys desired more independence, etc. For the entire group, Service to Mankind was of greatest importance; Demands responsibility, and Adventure were of least importance.—*G. S. Speer.*

2197. *Gemelli, Agostino.* *L'orientamento professionale dei giovani nelle scuole.* (Vocational guidance of youths in school.) (2nd ed.) Milan: Società Editrice "Vita e Pensiero," 1947. viii, 185.—Some positive steps are proposed for the development of vocational guidance in Italy. Vocational guidance is based not only on the analysis of individual skills and abilities, but especially on the diagnosis of personality,—a diagnostic judgment resulting from the global estimation of attitudes, interests, needs, and opportunities, all considered in relation to the social conditions under which they may be realized. Such a study ought to continue not only while youth is attending school, but throughout his life time.—*N. De Palma.*

2198. *Guilford, J. P., & Zimmerman, Wayne S.* (*U. Southern California, Los Angeles.*) Some A.A.F.

findings concerning aptitude factors. *Occupations*, 1947, 26, 154-159.—As a result of psychological research in the A.A.F., a number of factor studies were made, and many factors isolated. Of these, 27 appear to have some significance for vocational counselors. 11 intellectual factors, 8 perceptual, 3 psychomotor, 3 information, and 2 miscellaneous factors are briefly described.—G. S. Speer.

2199. Kosiak, Paul T. (*Veterans Administration, Washington, D. C.*) **Counselors! Use Part IV, D.O.T.!** *Occupations*, 1948, 26, 224-227.—The use of Part IV, D.O.T. as a counseling tool is carefully explained.—G. S. Speer.

2200. Lindgren, Henry C. (*VA, Branch 12 Office, San Francisco, Calif.*) **A study of certain aspects of the Lee-Thorpe Occupational Interest Inventory.** *J. educ. Psychol.*, 1947, 38, 353-362.—Counselors at a Veterans Administration guidance center administered to a number of cases both the Lee-Thorpe Occupational Inventory, (OII), and the Kuder Preference Record, (KPR), as well as the Otis Gamma, Forms A and B of the Otis Quick Scoring Test of Mental Ability. Between Otis Gamma and the various scales of the OII, correlation was shown only in the case of the 'Level of Interest' scale. On the other hand, substantial positive correlation appeared between certain scales of OII and KPR, "in most cases confirming relationships which might be presumed on a logical or inspectional basis."—E. B. Mallory.

2201. Lough, Orpha Maust. (*Skidmore Coll., Saratoga Springs, N. Y.*) **Women students in liberal arts, nursing, and teacher training curricula and the Minnesota Multiphasic Personality Inventory.** *J. appl. Psychol.*, 1947, 31, 437-445.—No statistically significant differences exist on any scales of the Minnesota Multiphasic Personality Inventory between women enrolled in the curriculum for elementary school teachers, music, nursing, or liberal arts, although certain tendencies appear. All of the groups appear stable and normal. Recommendations are made for the use of the Minnesota Multiphasic Personality Inventory in vocational counseling. 22 references.—C. G. Browne.

2202. Michelman, C. A. (*Illinois State Dept. Education, Springfield.*) **Techniques for classifying occupations.** In Hamrin, S. A., & Endicott, F. S., *Improving guidance and personnel services through research*, 55-69. (see 22: 2137)—Various extant methods of occupational classification (including convenience classifications such as the census groupings, various special classifications, ability patterns, and the USES Job Families) are reviewed by the author and found inadequate to meet the needs of vocational education, choice, and placement. The author describes a technique he developed for "classifying occupations according to the demands made on certain personal characteristics of workers." (1) A list of job requirements was compiled, including 31 "characteristics" such as "agility," "taste," "self-sufficiency," "methodical ability" and "dominance." (2) Using a 5-point

rating scale, psychographs were prepared for 200 occupations, using descriptions of occupational content found in the vocational literature. (3) Occupational relationships were determined by comparing each occupation in the list with each of the other 199 occupations. This relationship was expressed in terms of the percentage of agreements in rating of a pair of occupations to the total number of rating on both occupations. (4) Tentative constellations of occupations were identified by grouping together occupations that had an 80% relationship. 36 such constellations are presented. The writer claims that the technique has important implications for vocational guidance in that "it indicates the possibility of considering jobs in terms of vocational families rather than a vast number of discrete units."—P. Ash.

2203. Roberts, Andrew. (*Vallejo (Calif.) Junior Coll.*) **School-leavers show lack of vocational guidance.** *Occupations*, 1947, 26, 171-174.—From a survey of a sampling of 96 veterans from a population of 1131, it is concluded that "there is a widespread inadequacy of vocational guidance for the boys and girls who are products of the present American educational system."—G. S. Speer.

2204. Schloerb, Lester J. (*Bureau of Occupational Research, Chicago Board of Ed., Chicago, Ill.*) **Future developments in occupational research.** In Hamrin, S. A., & Endicott, F. S., *Improving guidance and personnel services through research*, 117-123. (see 22: 2137)—Occupational research activities by government, private publishers, professional and service organizations, industry, and schools are reviewed, and 6 trends in such research are identified. They include (1) extension of government research services and vocational guidance services, (2) development of geographical area studies, (3) a trend towards limiting research to areas where need is significant and apparent, (4) a more realistic approach on the part of industry to real job needs, (5) a recognition of many more human factors which must be considered in meeting job needs, and (6) increasing research in the field of leisure-time activities. As regards methods of collecting occupational data, an "even more scientific approach to sound vocational guidance" is seen, the census is found to be expanding, and measuring devices are being used more and more effectively. With respect to the use of occupational research, trends in the direction of more practical methods, wider employment of visual materials and radio, and interpretation for local use are noted.—P. Ash.

2205. Triggs, Frances Oralind. **Critique of Van Allyn's system of vocational counseling.** *J. appl. Psychol.*, 1947, 31, 536-544.—Van Allyn (see 19: 2733) has offered the Job Qualifications Inventory (JQI) and the Job Placement Reference (JPR) for use in vocational counseling and job placement. As an interest inventory, Van Allyn has not established either validity or reliability for the JQI, and the nature of it indicates that it does not measure "interests" in the sense that one needs to measure

them in counseling for further education, placement, or change of employment. Van Allyn's statements regarding ability and interests, personality and interests, and the permanency of interests are largely unjustified on the basis of present research findings on these subjects.—C. G. Browne.

[See also abstracts 1935, 1938, 1939, 1972, 1984, 2094, 2318, 2326, 2331, 2334.]

BEHAVIOR DEVIATIONS

2206. Bovet, Th. *Die person, ihre Krankheiten und Wandlungen*, (The person, his maladies and transformations.) Bern: Paul Haupt, 1946. 199 p. Fr. 9.50.—This is the first volume of a collection *Der Mensch und seine Ordnung* (Man and his Order); it is intended to give the physician and the medical student an orientation in philosophical and psychological matters. The first 3 chapters are a condensed summary of the most important literature on the concept of the body, soul and mind as a whole and in particular on the mutual dependence of body and soul. In the next chapters Bovet advances a concept of sickness as a reaction of the whole person rather than of a single organ, and discusses modern concepts of the psychoneuroses. The last part of the book is concerned with phylo- and ontogenetic transformations (in Jungian terms), with the subconscious, the *id*, *ego*, and *super-ego*, conversion, and other analytic concepts, and with psychotherapy at various depth levels. In a final chapter, entitled "Patient and Physician," the psychological aspects of this relationship are emphasized. 190-item bibliography.—R. Lassner.

2207. Burton, Arthur (Willamette U., Salem, Ore.), & Harris, Robert E. [Eds.] *Case histories in clinical and abnormal psychology*. New York: Harpers, 1947, xii, 680 p. \$4.00.—The 43 individual case studies collected in this volume represent the efforts of 44 clinicians from institutions in all parts of the United States. The book's value as a supplementary teaching aid is stressed in an introduction by Murray. The cases reported were selected from the files and many contain raw data. Mechanical and conceptual clinical tools utilized are explained and discussed in full, as are the inferences made and final formulations drawn. The material presented demonstrates problems in the major functional psychoses, the psychoneuroses and psychosomatic conditions, mental disorders with brain damage, mental deficiencies, primary behavior disorders, emotional problems of childhood, special disabilities, and personnel counseling. References follow most histories.—H. P. David.

2208. Cameron, Norman. (U. Wisconsin, Madison.) *The psychology of behavior disorders; a biosocial interpretation*. Boston: Houghton Mifflin, 1947. xxi, 622 p. \$5.00.—Rejecting psychosomatic dualism on one hand and classical behaviorism on the other, the author presents a "holistic and analytical" point of view of the behavior disorders. The first 6 introductory chapters deal with such general

topics as personality development, behavior organization, language, thought and role taking, need, frustration and conflict, and adjustive techniques, as related to the behavior deviations. The remaining chapters, with the exception of the last, which is devoted to "therapy as biosocial behavior," deal with a wide range of behavior disturbances: delusions and hallucinations, hypochondriacal disorders, fatigue syndromes, anxiety disorders, compulsive disorders, hysterical (inactivation and autonomy) disorders, paranoid, schizophrenic, manic depressive, and disorders related to cerebral incompetence. Each chapter deals with the varieties, biosocial bases and determinants of the respective disorder. The relation of each type of disturbance to the other disorders is also discussed.—A. Rabin.

2209. Dunbar, Flanders. *Mind and body: psychosomatic medicine*. New York: Random House, 1947. ix, 263. \$3.50.—A discussion of problems in psychosomatic medicine for the layman. Drawing upon her background of experience as a practitioner of psychosomatic techniques, the author gives numerous case studies to show how emotions cause certain physical reactions. Emotional shocks in childhood, forgotten incidents in adulthood, or a series of emotional conflicts over a period of years, often express themselves as organic diseases of the heart and stomach, as asthma, allergies, or other chemical disturbances of the body. Some of the techniques used by skilled practitioners in discovering the causes of a physical ailment preparatory to a cure are given, and the progress medical science has made in aiding an understanding of the relationship between physical and psychic phenomena is discussed.—P. S. de Q. Cabot.

2210. Pacella, B. L., Piotrowski, Z., & Lewis, N. D. C. (Coll. Physicians and Surgeons, New York.) *The effects of electric convulsive therapy on certain personality traits in psychiatric patients*. *Amer. J. Psychiat.*, 1947, 104, 83-91.—Personality studies were conducted on a group of 75 psychiatric patients classified as psychoneurosis, schizophrenia, manic depressive psychosis, and involutional psychosis, before and after a course of electric convulsive therapy. The Minnesota Multiphasic Inventory and the Rorschach tests were used in the personality diagnosis. In general, the Rorschach test proved to be more effective as a diagnostic and prognostic aid.—R. D. Weitz.

2211. Page, James D. (Temple U., Philadelphia, Pa.) *Abnormal psychology; a clinical approach to psychological deviants*. New York: McGraw-Hill, 1947. xvii, 441 p. \$4.00.—"Written at a level suitable for undergraduates with a limited background in psychology," this textbook summarizes present knowledge concerning the causes, symptoms, treatment, and prognosis of the psychoneuroses, psychoses, mental deficiencies, and antisocial personalities. Presentation of the material conforms to that generally found in an introductory abnormal text. Various viewpoints are cited on controversial topics with major emphasis placed on genetic and constitu-

tional factors. Recent statistical data and explanatory figures are included. A bibliography follows each chapter. Glossary and list of visual aids.—*H. P. David.*

[See also abstracts 1924, 1927, 1969.]

MENTAL DEFICIENCY

2212. Dunn, L. C. (*Columbia U., New York.*) The effects of isolates on the frequency of a rare human gene. *Proc. nat. Acad. Sci., Wash.*, 1947, 33, 359-363.—The incidence of juvenile amaurotic family idiocy is discussed genetically and related to the hypothesis that rare recessive conditions cannot be expected to be distributed evenly throughout large populations because human aggregations form group isolates between which marriages rarely if ever occur. Sjogren's 1931 data on 115 cases of amaurotic idiocy are accordingly analyzed statistically to show the inaccuracy involved in applying mendelian principles to large populations rather than to "isolates" when "rate genes" are involved.—*L. A. Pennington.*

2213. Harris, Leroy A., & Kinney, Carolyn. (*Coldwater State Home and Training Sch., Coldwater, Mich.*) A program for reducing maladjustment in an institution for the mentally deficient. *Amer. J. ment. Def.*, 1947, 52, 78-84.—A program for the mentally retarded which has proved effective in meeting their needs and indirectly in reducing the incidence of maladjustment is described. Provision is made for education and training and opportunities are offered for participation in interesting avocational activities commensurate with their abilities. The program is based on socialization and the recognition of individual differences and has resulted in a more relaxed and happy institutional atmosphere with a marked decrease in maladjustment. The specific factors which the authors enumerate as having played a direct part in reducing incidence of maladjustment within the institution are as follows: (1) Having a relaxed, home-like atmosphere as free from restrictions as possible. (2) Placing all activities on an educational basis with provisions for individual guidance. (3) Providing a co-educational program which approximates as nearly as possible that of the community. (4) Maintaining community contacts on a widespread basis. (5) Making every attempt to treat each resident as a distinct personality. (6) Providing the residents at all times with interesting activities and events to which they may look forward with pleasant anticipation.—*V. M. Staudt.*

2214. Jolles, Isaac. (*Illinois Dept. Public Instruction, Springfield, Ill.*) A study of mental deficiency by the Rorschach technique. *Amer. J. ment. Def.*, 1947, 52, 37-42.—The use of the Rorschach test in studying mental defectives revealed serious emotional difficulties in all of the 34 cases examined in this study. The author points out that in a number of instances the emotional problems would not have been discovered in the clinical examination without the use of a projective technique such as the Rorschach test. Since there is reason to

believe that an individual's emotional adjustment affects his intellectual status, it appears that a study of an individual's mental level by the usual psychometric procedure is not complete without supplementary information from some projective technique. Additional evidence of this is the fact that anxiety, which is known to cripple an individual's intellectual processes, was found in the great majority of the cases studied. The fact that all of the cases studied presented emotional problems of a serious nature suggests the possibility that mental deficiency of the familial and undifferentiated types is a symptom of personality disorder rather than an indication of limited mental ability.—*V. M. Staudt.*

2215. Levinson, Abraham. (*Cook County Hosp., Chicago, Ill.*) Pneumoencephalography in mentally deficient children. *Amer. J. ment. Def.*, 1947, 52, 1-8.—Pneumoencephalography is a useful procedure in certain types of mental deficiency for establishing the nature and degree of pathology. It may be of value in treatment by revealing a remedial condition such as certain types of brain tumor, subdural hematoma, and sometimes arachnoiditis. It is valuable in facilitating interpretation of the child's mental status to the parents. When they are confronted with the encephalography plate, that shows them definitely that there is pathology that is not remediable. It prevents them from deluding themselves into thinking that things will improve.—*V. M. Staudt.*

2216. O'Brien, Margaret. (*Evanston Public Schools, District No. 75, Evanston, Ill.*) The occupational adjustment of persons who have been institutionalized. In Hamrin, S. A., & Endicott, F. S., *Improving guidance and personnel services through research*, 47-53. (see 22: 2137)—A group of 82 feebleminded individuals who had been placed in family care under the Illinois Placement Program was studied to evaluate factors involved in their vocational adjustment. For the whole group, an analysis was made of the Public Welfare records, and the social worker handling each case was interviewed. 20 cases, who had been released for at least 1 year, had I.Q.'s of 70 or lower, and had not been placed with relatives, were studied more intensively. Standardized interviews, ratings of worker satisfaction, employer satisfaction, social needs, and test measures were used. Over a 3-year period, out of the total group of 82, only 6 were re-institutionalized; 6 escaped while on work placement; 14 were discharged from state supervision; 56 remained on current work placement under state supervision. From the intensive part of the survey (20 cases) it was found that the group rated highest in worker satisfaction, next in employer satisfaction, and lowest in societal contribution.—*P. Ash.*

2217. Pollock, Horatio M. Family care of mental defectives in Scotland. *Amer. J. ment. Def.*, 1947, 52, 85-90.—The system of family care of mental defectives in Scotland is described. Its advantages as well as its inadequacies are discussed. The fact of continuance of family care in Scotland through

more than 9 decades is of itself, in the author's opinion, strong evidence of its value as a supplement to institution treatment. The further fact that home care of mental defectives is notably increasing indicates that it is meeting public approval and proving advantageous to both guardians and patients. Whether the Scottish system of family care of mental defectives could be extensively used in America is a question worthy of consideration.—V. M. Staudt.

2218. Ross, Mabel. (U.S. Public Health Service, Washington, D. C.) The relationship of the National Mental Health Act to the problems of mental deficiency. *Amer. J. ment. Def.*, 1947, 52, 48-53.—The provisions of the National Mental Health Act are discussed in respect to research, training and grants to the States. Special emphasis is given to the fact that mental deficiency is an important aspect of the mental health problems of any community. It is felt that research, training and service in the field of mental deficiency can be of immeasurable value to the fields of child psychiatry, community service, hospital planning, and home care.—V. M. Staudt.

2219. Scholl, Mary Louise L., Wheeler, Warren E., & Snyder, Laurence H. (Ohio State U., Columbus.) Rh antibodies in mothers of feeble-minded children. *J. Hered.*, 1947, 38, 253-256.—Previously reported case material on the relationship between the Rh factor and undifferentiated feeble-mindedness has been restudied from an immunological point of view. One instance of Rh sensitization among 11 Rh negative mothers who had delivered Rh positive children was found, with no instances disclosed of erythroblastosis fetalis among their subsequent children. While recognizing limitations as to the number of cases and the time interval following delivery, the authors feel that their results do not support the theory that Rh incompatibility between the mother and child is responsible for feeble-mindedness in the child. Six different criteria for adequate future experimentation are set forth: the number of cases should be at least 25; immunologic studies should be performed as soon as the child is diagnosed as mentally deficient, preferably before one year of age; subsequent children should be studied for evidences of erythroblastosis at birth; feeble-mindedness classification criteria should be stated; and data should be given on the occurrence of other neurologic disorders, such as atresia, convulsions, and spasticity.—C. G. Schwesinger.

2220. Sloan, William. (Lincoln State Sch., & Colony, Lincoln, Ill.) Mental deficiency as a symptom of personality disturbance. *Amer. J. ment. Def.*, 1947, 52, 31-36.—In order to determine objectively the presence of mental deficiency as a symptom of personality disturbance, two groups were studied, using the Rorschach Test. The first group did not appear to be psychometrically defective but had been so committed legally. The group was made up of 24 subjects from 16 years to 50 years chronologically, 7 females and 17 males, whose

Wechsler IQ's ranged from 80 to 101. The ways in which this group deviated from the expected Rorschach pattern for mental defectives were determined. A second group of 26 subjects ranging in age from 16 to 48 years, and divided equally as to sex was compared with the first group. The IQ's of the second group ranged from 44 to 79. The deviations from the pattern of mental deficiency were found to be comparable, quantitatively, for both groups. The author feels, therefore, that it may be presumed that some personality disturbance is basic in the second group and is manifested, in part, by mental deficiency. Further research is indicated by this study for the derivation of adequate norms for mental defectives. Qualitative studies of individual cases with personality problems who appear to be mental defectives should be made. More thorough evaluation of individuals under consideration for commitment is also needed.—V. M. Staudt.

2221. Stevenson, George S. (The National Committee for Mental Hygiene, Inc., New York.) Where and whither in mental deficiency. *Amer. J. ment. Def.*, 1947, 52, 43-47.—The author presents a diagnosis of the present status of the field of mental deficiency. Neglect at every phase of work with the mentally deficient is indicated and a plea is made for the development of a new program.—V. M. Staudt.

2222. Wardell, Winifred. (Bureau of Social Work, Calif. State Dept. of Mental Hygiene, Sacramento.) Case work with parents of mentally deficient children. *Amer. J. ment. Def.*, 1947, 52, 91-97.—The importance of aiding parents of mentally deficient children to overcome their feelings of guilt, discouragement, and self accusation is discussed. It is felt that the case worker should help the parents reach a point of understanding and emotional security. The author states that just as the fact is accepted that a great many of the problems of normal youth are an outgrowth of environment, so it is also true that many of the social and emotional difficulties of the mentally handicapped group reflect parental attitudes. Accordingly, the extension of case work services to the parents of these children accomplishes the dual purpose of assisting both the parents and the children in their adjustment to society.—V. M. Staudt.

[See also abstracts 2174, 2316.]

BEHAVIOR PROBLEMS

2223. Engel, George L., & Romano, John. (U. Rochester, N. Y.) Studies of syncope: IV. Biologic interpretation of vasodepressor syncope. *Psychosom. Med.*, 1947, 9, 288-294.—A presentation of a concept, supported by experimental evidence, that vasodepressor syncope, as probably the most common type of fainting, occurs when a primitive reflex preparation for flight or struggle is initiated and when the appropriate action is either impossible or must be inhibited. As muscle weakness is the most common and earliest symptom, inhibition of voluntary

muscle tone is a suggested important feature although the authors do not claim that muscle is the only site of vasodilation during vasodepressor syncope. Differences between hysterical and vasodepressor syncope are reviewed.—*P. S. de Q. Cabot.*

2224. Huber, Francis. Incontinence of urine in children. *Arch. Pediat.*, 1947, 64, 199-205.—The causes, prognosis, and treatment of incontinence of urine are discussed in this reprint of an article first published in 1899.—*M. C. Templin.*

2225. Sperling, Melitta. The analysis of an exhibitionist. *Int. J. Psycho-Anal.*, 1947, 28, 32-45.—A detailed report is given of the clinical findings after 2.5 years of psycho-analysis of a 29-year-old male exhibitionist, with special emphasis upon his mother-relationships. The conclusion was offered that, in spite of intense castration fear and unconscious homosexual submissiveness to his father, the deeper roots of his perversion sprang from his early relationship and identification with his mother. Additionally, the greatest obstacle to therapy is the extreme narcissism of the exhibitionist. 12 references.—*M. H. Erickson.*

2226. Sweet, Clifford. Enuresis, a psychologic problem of childhood. *J. Amer. med. Ass.*, 1946, 132, 279-281.—Enuresis is discussed as a psychosomatic problem and a method of instructing parents is outlined.—(Courtesy of *Child Developm. Abstr.*)

2227. Thompson, Clara. Changing concepts of homosexuality in psychoanalysis. *Psychiatry*, 1947, 10, 183-189.—Concepts of homosexuality are loose, poorly defined, inaccurately used, and socially stigmatized. Review is given of the various psychoanalytic ideas about homosexuality in accord with Freudian principles. The conclusion is reached that homosexuality is primarily a symptom of a neurotic structure or neurotic development rather than a cause of neurosis and that primary attention in psychoanalysis should be given to the personality structure.—*M. H. Erickson.*

2228. Thorne, Frederick C. (*U. Vermont, Burlington.*) Etiological studies of psychopathic personality: the ego-inflated, defectively-conditioned type. *J. consult. Psychol.*, 1947, 11, 299-309.—This paper attempts to delineate the dynamic factors believed to be etiological in a type of psychopathic personality characterized by over-inflated ego and defective conditioning. An hypothesis is offered presenting a pattern of development which is believed responsible for psychopathy of this type. Five illustrative cases are presented which show many of the etiologic patterns postulated for this clinical group. It is concluded that a dynamic understanding of the personality mechanisms makes possible a rational approach to prevention and therapy.—*S. G. Dulsky.*

[See also abstracts 2166, 2193, 2312, 2317.]

SPEECH DISORDERS

[See abstract 2097.]

CRIME & DELINQUENCY

2229. Bowlus, D. E. (*Claremont (Calif.) Graduate Sch.*), & Shotwell, Anna M. (*Pacific Colony, Spadra, Calif.*) A Rorschach study of psychopathic delinquency. *Amer. J. ment. Def.*, 1947, 52, 23-30.—This study was undertaken as a preliminary step towards outlining an improved program for the care and treatment of psychopathic delinquents in Pacific Colony, a state institution for mental defectives and epileptics in California. The subjects were 12 girls between the ages of 15-1 and 27-5, who had been diagnosed as psychopathic delinquents either before or after commitment. The Rorschach records of these girls showed the following qualities: frivolousness, coyness, flightiness, sketchiness and self-centeredness. In addition the psychopath showed a peculiar unwillingness to understand herself, a characteristic which complicates treatment. These psychopathic individuals were so profoundly inadequate and so utterly childish that self-examination was quite impossible. The authors feel that the training and management of the psychopathic delinquents is not hopeless if it has something of the nursery school flavor, with consistent and immediate rewards and punishments; with ready sympathy but with equally ready severity; with simple, expressive, interesting activities; with clearly defined rules and regulations.—*V. M. Staudt.*

2230. Despert, J. Louise. (*Cornell U. Med. Coll., New York.*) Is juvenile delinquency a psychiatric problem? *Nerv. Child*, 1947, 6, 371-391.—The legal aspects of juvenile delinquency in the State of New York are reviewed, with particular emphasis on the legal definition of a juvenile delinquent, the Children's Court Act, court procedure in various counties, and the qualifications and functions of the probation officer. The treatment of delinquent girls in the State Training School for Girls is discussed, and clinical data on 43 girls committed to the school are analyzed. The State school is briefly compared with a private institution with a similar function. Some revision of the philosophy of treatment at the State Institution is suggested. 26 references.—*G. S. Speer.*

2231. Doniger, Simon. The psychiatric treatment of a juvenile delinquent. *Nerv. Child*, 1947, 6, 424-435.—A case of juvenile delinquency which was successfully treated by psychiatric methods is presented. The author's thesis is that anti-social behavior is caused by emotional disturbance resulting from conflicting and frequently unconscious needs. It is believed that such behavior almost inevitably occurs as a defense reaction to protect the individual from unconscious needs and wishes on one hand, and the guilt and anxiety resulting from a rigid super-ego, on the other.—*G. S. Speer.*

2232. Foxe, Arthur N. The anti-social aspects of epilepsy. In *Hoch, P. H., & Knight, R. P., Epilepsy.* (see 22: 2263) p. 69-88.—Public indifference to the problem of epilepsy makes it particularly favorable for relative if not absolute scientific study. In dealing with this area, the author stresses the definition of epilepsy, the influence of heredity, the anti-social

aspects of epilepsy in the past, the epileptic seizure, and a note on treatment. The overall conclusion is that the epileptic is a sick person whose criminogenic tendencies appear to be less than the average. 29 references.—*R. D. Weits.*

2233. Friedlander, Kate. The psycho-analytical approach to juvenile delinquency; theory, case-studies, treatment. London: K. Paul, Trench, Trubner, 1947. 296 p. \$5.50.—Expressed by the author, is the necessity for a united endeavor to be made through the cooperative effort of sociology, criminology, penology, psychology and psychiatry, as an important pre-requisite for progress in the prevention of juvenile delinquency. The problems of juvenile delinquency are brought to view and studied in the light of Freudian psychoanalysis. This book endeavors to demonstrate where psychoanalysis is applicable and to what degree it is utilizable. The author shows in what way sociological and criminological research workers can make use of psychoanalytical findings in order to further their own investigations. The psychoanalytic theory is explained specifically in relation to delinquency, case-studies are provided, and methods of treatment are compared and evaluated and suggestions are made. Significant throughout this volume is the use of the sociological approach and the emphasis placed upon prevention as a goal, rather than correction. 35 references.—*J. Barron.*

2234. Gardner, George E. The primary and secondary gains in stealing. *Nerv. Child*, 1947, 6, 436-446.—All stealing, of any age, type, or duration, is at least partially neurotic. Several case histories are presented and discussed to illustrate this thesis.—*G. S. Speer.*

2235. Hirschberg, Rudolf. The socialized delinquent; concept, etiology, psychometric evaluation and institutional training. *Nerv. Child*, 1947, 6, 447-466.—Recognizing the unsocialized aggressive child, the socialized delinquent, and the overinhibited child as 3 different "patterns of maladjustment," the author presents a dynamic concept of social maturity which regards these different types of juvenile delinquency as different stages of ego-development. The more intensive therapy is reserved for the conflicted delinquent; therapeutic work with the non-conflicted delinquent is primarily a matter of re-training and re-education.—*G. S. Speer.*

2236. Ireland, Effie C. (Laurelton State Village, Laurelton, Pa.) The female defective delinquent. *Amer. J. ment. Def.*, 1947, 52, 63-70.—The results of a survey made by the author concerning the provisions of the various states for the defective delinquent are reported. Throughout the U.S. it appears that the defective delinquent presents a serious problem in the great majority of institutions largely because of the fact that of necessity he is housed in institutions for the mental defectives. The author feels that the criminal type belongs to the penal set-up and not with the ordinary mental defective group. A plea is made for special study of the prob-

lems of the defective delinquent as well as for the adoption of definite policies and plans in order that suggestions may be offered to legislators and social agencies for the treatment and care of this group.—*V. M. Staudt.*

2237. Kennedy, Foster, (Bellevue Hosp., New York.), Hoffman, Harry R., & Haines, William H. A study of William Heirens. *Amer. J. Psychiat.*, 1947, 104, 113-121.—The case of William Heirens, convicted of assault, burglary and murder, by the State of Illinois, is reviewed by the psychiatric commission appointed by the court for his examination. The dynamics of the crimes, the medical, psychiatric, and psychological findings, and the legal disposition of the case are discussed.—*R. D. Weits.*

2238. Norman, Sherwood. Conflict in delinquency control. *Nerv. Child*, 1947, 6, 364-370.—Much of the frustration and conflict in delinquency control could be eliminated by (1) the establishment of a comprehensive research center; (2) the organization of social agencies so (a) there is coverage sufficient to meet the physical and psychological needs of different groups of children, and (b) that there is the kind of coordination between these agencies which will make possible a fitting together of philosophy and function based on the findings of research; (3) the specialized training of personnel in the field of probation, parole, and institutional work.—*G. S. Speer.*

2239. Smith, Groves B. (Beverly Farms, Godfrey, Ill.) Defective delinquents and the problem of personality deviation in relation to crime. *Amer. J. ment. Def.*, 1947, 52, 54-62.—Observations of criminal behavior among mental defectives indicate that there are two distinct entities: (1) the mental defective with superimposed anti-social tendencies in whom there is need for more adequate understanding on the part of community forces; (2) the defective delinquent who presents, by reason of personality disorganization, difficulties in community and institutional adjustment and whose return back to an extra-mural environment presents a major social problem unless he has had an opportunity at readjustment in an understanding institutional environment. The author believes that defective delinquents should be returned to the community by means of a return through the schools for mental defectives, for this presents an intermediary environment which will tend to clarify the degree of insight that they have obtained in previous years. In this disciplinary environment adequate opportunities can be afforded for vocational planning and psychiatric rehabilitation as well as supervision until such times as the individuals demonstrate stabilization of habit patterns that will render them acceptable members of society.—*V. M. Staudt.*

2240. Wallerstein, James S. Roots of delinquency. *Nerv. Child*, 1947, 6, 399-412.—The roots of delinquency are found in slums, "social accidents," acceptance by small criminal groups when rejected by the larger society, and in symbolic gratification of psychic tensions.—*G. S. Speer.*

2241. Wallerstein, James S., & Wyle, Clement J. "Biological inferiority" as a cause for delinquency; E. A. Hooton's findings reviewed and analysed. *Nerv. Child*, 1947, 6, 467-472.—E. A. Hooton's "The American Criminal" is reviewed in considerable detail. After examining the statistical data presented by Hooton, it is concluded that there is "a complete lack of connection" between his data and his conclusions.—G. S. Speer.

[See also abstracts 1989, 2145, 2184, 2189.]

PSYCHOSES

2242. Boisen, Anton T. (Elgin St. Hosp., Ill.) Onset in acute schizophrenia. *Psychiatry*, 1947, 10, 159-166.—A case history is cited to show that the development of acute schizophrenia is marked by a succession of stages which bear a striking similarity to the development of insightful thinking. There is a period of preparation or frustration concerning some unsolved problem, a period of narrowed attention succeeded by a disturbing idea and a process of elaboration. Schizophrenic thinking is discussed as an attempt at creative construction which may fail and the relationship between the schizophrenic reaction and religious experience is touched upon. Psychotherapy requires a true understanding of both constructive and destructive forces operating in acute schizophrenia. 13 references.—M. H. Erickson.

2243. Cohen, Robert A. (Chestnut Lodge, Rockville, Maryland.) The management of anxiety in a case of paranoid schizophrenia. *Psychiatry*, 1947, 10, 143-157.—A detailed account is given of the slow process of the development of limited interpersonal relationships permitting the acceptance of psychotherapy by a 20-year-old woman suffering from paranoid schizophrenia. Two dynamisms were employed by the patient in her psychotic defenses against therapy. When obsessional defenses failed to dispose of anxiety, she resorted to paranoid reactions, and these were the primary response when rage was expressed against some permissible target. M. H. Erickson.

2244. Despert, J. Louise. (Cornell U., Med. Coll., New York.) Psychotherapy in child schizophrenia. *Amer. J. Psychiat.*, 1947, 104, 36-43.—Seven schizophrenic children, six boys and one girl, received ambulatory treatment, psychotherapy, over periods ranging from a few months to 2.5 years, with varying degrees of success. Summaries of the 7 cases are presented, with emphasis on therapy and progress. On the whole, chances for relative recovery and adjustment seem to be greater than is the case with therapy in institutions. 14 references.—R. D. Weitz.

2245. Sechehaye, M.-A. La réalisation symbolique; nouvelle méthode de psychothérapie appliquée à un cas de schizophrénie. (Symbolic realization; new method of psychotherapy applied to a case of schizophrenia.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1947, No. 12. 96 p.—The history and treatment of a young woman schizophrenic (CA

18-26) are reviewed. Ordinary psychoanalytic methods with verbal interpretation merely increased negativism and intensified the psychosis. Conflicts were then worked through successfully on the basis of the patient's own symbolizations. The case seemed to be one of severe conflict based on maternal rejection, antedating the formation of the ego.—R. B. Ammons.

2246. Staveren, Herbert. (Chestnut Lodge, Rockville, Md.) Suggested specificity of certain dynamisms in a case of schizophrenia. *Psychiatry*, 1947, 10, 127-135.—The study of clinical course of a patient, whose overt illness began at about the age of 14, disclosed a certain specificity of dynamisms for certain areas in which anxiety was aroused. There was a predominantly obsessional process aroused by unmistakably hateful feelings directed to the parents. There followed a paranoid system in relation to anxiety over the fact of overt mental illness. This was succeeded by a period of mixed obsessional and paranoid manifestations of a milder sort and less specific. The present state, now having a favorable outlook, is characterized by the handling of anxiety deriving from complete despair by manic-like behavior.—M. H. Erickson.

2247. Sullivan, Harry Stack. Therapeutic investigations in schizophrenia. *Psychiatry*, 1947, 10, 121-125.—This paper is an introduction to 3 papers (see 22: 2243, 2246, 2187) demonstrating, "(1) That the chronicity of a schizophrenic way of life does not preclude a collaboration with the patient important for psychiatry as clinical research and with benefit to the patient. (2) That extraordinary use of obsessional substitutive processes is a feature of manifestly schizophrenic people . . . (3) That the long context of the interpersonal relationship sheds useful light on the difficulties in living, while involvement in the obsessional content itself would get nowhere. (4) That this long-context approach is the prime function of the psychiatrist, because the patient's way of life precludes its appearance in easily recalled 'free association.' (5) That the patient in this group has been denied much developmental opportunity, and that the handicap resulting from this must be remedied, at least initially, by active participation by the physician. (6) That 'reassurance' is an intricate process depending chiefly on the patient's inferences from superficially unrelated remarks of the physician functioning as an expert in interpersonal relations. (7) That success in therapy and research is basically dependent on the physician's skill in handling the movements of anxiety in the patient."—M. H. Erickson.

[See also abstracts 2011, 2187, 2254.]

PSYCHONEUROSES

2248. Sobel, Raymond. The "Old Sergeant" syndrome. *Psychiatry*, 1947, 10, 315-321.—The "Old Sergeant" syndrome occurs in well-motivated previously efficient soldiers as a result of the chronic progressive breakdown of normal defenses against

anxiety during long periods of combat. Discussion is given of the symptomatology and of two illustrative cases.—*M. H. Erickson.*

2249. Weinstein, Edwin A. The function of interpersonal relations in the neurosis of combat. *Psychiatry*, 1947, 10, 307-314.—Among soldiers with combat induced neuroses, there are 3 main types of character-conditioned hostility leading to faulty interpersonal relations and a predisposition for combat anxiety. Type one occurs in the passive dependent person, who expended no aggressive energy and completely repressed all hostility. The second type of hostility occurred in the overtly hostile person who could not use hostility purposively. The third type was seen in soldiers with compulsive obsessive traits barring them from healthy interpersonal relationships. Not hate of the enemy but the maintainance of good interpersonal relationships with the group served to prevent combat neurosis.—*M. H. Erickson.*

[See also abstracts 2124, 2171, 2181.]

PSYCHOSOMATICS

2250. Cornbleet, Theodore (*U. Illinois Med. Sch. Chicago*), & Brown, Meyer. Dermatologic manifestations in psychiatric disorders. *J. Amer. med. Ass.*, 1948, 136, 152-157.—"Certain symptoms and signs of the skin and its appendages, as well as the accessible mucosae, often are indicative of an underlying psychiatric disease. There is a brief description of four common psychiatric disorders in which cutaneous changes occur. Guideposts are suggested in the examination of the patient for the recognition of psychiatric disease. It is emphasized that earlier detection of an underlying mental illness improves therapeutic results and avoids prolonged misinterpretation and suffering."—Abstract of discussion.—*C. M. Louttit.*

2251. Hart, Andrew D. (*U. Virginia Hosp., Charlottesville*). Psychosomatic diagnosis. *J. Amer. med. Ass.*, 1948, 136, 147-152.—The general medical practitioner and non-psychiatric specialist must become increasingly aware of the importance of psychosomatic aspects in the complaints of their patients. "Reliable criteria for the prompt recognition of psychosomatic disease may be found among the unconsciously motivated resistance symptoms that accompany the illness and indicate its utility to the patient. These resistances, manifested by attitudes and behavior basically obstructive to medical treatment, constitute objective phenomena that serve to indicate the dynamic biologic significance of the total illness."—*C. M. Louttit.*

2252. Johnson, Adelaide, Shapiro, Louis B., & Alexander, Franz. (*Instit. Psychoanalysis, Chicago, Ill.*) Preliminary report on a psychosomatic study of rheumatoid arthritis. *Psychosom. Med.*, 1947, 9, 295-300.—Based on a study of interview data obtained from 4 male and 29 female patients with rheumatoid arthritis the authors describe overt personality features, precipitating events, and the

immediate unconscious background factors involved. Certain family constellations were found to be typical of these patients. "In the majority of our cases the unconscious tendencies which find expression and discharge in the muscle system are chronic hostile aggressive impulses and the defense against them . . . the general psychosomatic background is a chronic inhibited hostile aggressive state as a reaction to the earliest masochistic dependence on the mother that is carried over to the father and all human relationships, including the sexual." 19 references.—*P. S. de Q. Cabot.*

2253. Kupper, Herbert L. (230 S. Robertson Blvd., Beverly Hills, Calif.) Some aspects of the dream in psychosomatic disease. *Psychosom. Med.*, 1947, 9, 310-319.—Sleep is regarded as a nightly regression "to a primitive narcissistic state when the ego attempts to recover from injuries to its narcissism by going back to earlier stages in instinctual development." Reality is temporarily denied and the motor areas of the brain are blocked. In two unusual male cases of angioneurotic edema and convulsive seizure, symptoms appeared only during and after dream states. Forecasting organic illness by the unconscious is suggested on the basis of increased internal perception producing dreams where "forbidden aggressive and instinctual drives were acted out in the dream state and the symptom complex was substituted for the thwarted motor discharge."—*P. S. de Q. Cabot.*

2254. Simon, Werner. (*Vet. Adm. Hosp., St. Cloud, Minn.*) Vasospasm of the radial arteries in schizophrenia: report of two cases. *Milit. Surg.*, 1947, 101, 290-293.—Schizophrenics manifest a number of psychosomatic conditions indicative of an autonomic imbalance; dilated pupils, sluggish pupillary response, and increased salivation. Spasm of the radial arteries is common in the catatonic type but is also encountered in chronic anxiety states and other types of psychogenic disorders. It is believed that vasomotor responses due to emotional factors are of far reaching importance in the etiology of peripheral vascular diseases.—*G. W. Knox.*

2255. Szasz, Thomas S., Lewin, Erwin, Kirsner, Joseph B., & Palmer, Walter Lincoln. (*U. Chicago, Ill.*) The rôle of hostility in the pathogenesis of peptic ulcer: theoretical considerations with the report of a case. *Psychosom. Med.*, 1947, 9, 331-336.—A review of the role of psychogenetic factors in peptic ulcers followed by a presentation of a case history of a 23 year old male peptic ulcer patient with a quantitative demonstration of the production of a large amount of hydrochloric acid provoked by the psychological stimulus of anger obtained after the complete inhibition of gastric acidity by enterogastrone. After bilateral vagus section the stimulating effect of anger was abolished. 19 references.—*P. S. de Q. Cabot.*

2256. Wolberg, Lewis R. (*Flower-Fifth Ave. Hosp., New York*). Hypnotic experiments in psychosomatic medicine. *Psychosom. Med.*, 1947, 9, 337-342.—A presentation of several cases where

unconscious conflicts induced during hypnosis resulted in psychosomatic symptoms which were physiological manifestations of tension and anxiety and which disappeared when the conflicts were resolved.—*P. S. de Q. Cabot.*

2257. Woodhead, Barbara. The psychologic aspects of allergic skin reactions in childhood. *Arch. Dis. Childh.*, 1946, 21, 98-105.—26 adolescent children with allergic skin reactions were studied psychologically. Severe psychologic problems were observed in the great majority of parents. All but one child had superior intelligence. They were determined, aggressive, and egotistic; sensitive and self-conscious about their skin. Two factors seem to be operative: a constitutional predisposition to allergic manifestations, and some parent-child psychologic problem. The child reacts to an unfavorable environment through his allergic symptoms.—(Courtesy of *Child Developm. Abstr.*)

[See also abstracts 2161, 2169, 2185, 2274.]

CLINICAL NEUROLOGY

2258. Belinson, Louis (*Dixon State Hosp., Dixon, Ill.*), & Cowie, William S. Electroencephalographic characteristics of institutionalized epileptics. *Amer. J. ment. Def.*, 1947, 52, 9-15.—The electroencephalographic tracings of 300 institutionalized epileptics were compared with 1000 controls and 730 non-institutionalized epileptics studied in another investigation. The results, as reported by the author, are as follows: (1) The institutionalized epileptic problem is one definitely associated with mental deficiency. (2) Within the background frequency patterns, the institutionalized epileptic group reveals a very marked increase in very slow frequencies, comprising about 25% of the total electroencephalograms studied. (3) Electroencephalograms reveal a total of 26% of the institutionalized group having psychomotor type seizure discharges in contrast to the 10% and 7% reported in studies of non-institutionalized epileptic patients. (4) The electroencephalograms of institutional epileptics show a greater degree of irregularity, fluctuation of voltage and a mixture of frequencies. (5) Psychomotor epilepsy seems to be the basis for difficult behavior problems among institutional epileptics and individuals with psychomotor epilepsy tend to find their way to institutions.—*V. M. Staudt.*

2259. Bunker, Henry Alden. Epilepsy: a brief historical sketch. In *Hoch, P. H., & Knight, R. P., Epilepsy.* (see 22: 2263) p. 1-14.—The history of epilepsy is outlined from Hippocrates to the present. The author evaluates the influences of both the mystical and the scientific contributions to the growth of knowledge concerning this disease. He states that the history of epilepsy might well serve as a monument to human error. 65-item bibliography.—*R. D. Weitz.*

2260. Collier, G. Kirby. Social implications and management. In *Hoch, P. H., & Knight, R. P., Epilepsy.* (see 22: 2263) p. 58-68.—A receptive

environment is a most important factor in the treatment of epilepsy. The place of the home, the colony, and the school in fulfilling this role is discussed. Widespread misconceptions concerning epilepsy must be reduced to facilitate progress in studying the disease.—*R. D. Weitz.*

2261. Diethelm, Oskar. (*Cornell U., Med. Coll., New York.*) Differential diagnosis of epilepsy. In *Hoch, P. H., & Knight, R. P., Epilepsy.* (see 22: 2263) p. 109-122.—Psychopathological considerations in the diagnosis of epilepsy have at times been emphasized considerably but, on the whole, have not maintained their importance. The diagnosis is now usually made on a neurological basis. Psychopathological findings, however, are diagnostically most valuable. Electroencephalographic studies have shown new leads and with a better understanding of neurophysiology, psychology, and psychopathology, further progress will be made. 14 references.—*R. D. Weitz.*

2262. Hoch, Paul H. (*N. Y. State Psychiatric Inst., New York.*) Some psychopathological aspects of organic brain damage. In *Hoch, P. H., & Knight, R. P., Epilepsy.* (see 22: 2263) p. 149-162.—A few important features in the psychopathology of brain damage are presented. Discussed first are the memory impairments which are seen in artificial brain damage. Electric shock therapy affords the opportunity to produce artificial damage in certain functions of the mind. The author then takes up the relationship of organic and psychogenic symptomatology in cases suffering from organic brain damage, and lastly discusses the influence of glutamic acid on the intellectual manifestations of patients who have an organic brain lesion. The three problems in this presentation are interrelated. They demonstrate that in patients who are suffering from organic brain damage due to sickness or artificially induced, psychic manifestations take place which are probably due to the organic impairment.—*R. D. Weitz.*

2263. Hoch, Paul H. (*New York State Psychiatric Institute, New York.*), & Knight, Robert P. (*The Menninger Clinic, Topeka, Kans.*) [Eds.] *Epilepsy; psychiatric aspects of convulsive disorders.* New York: Grune & Stratton, 1947. vii, 214 p. \$3.00.—This volume is an epitome of the proceedings of the thirty-sixth annual meeting of the American Psychopathological Association which was held in New York City in May 1946. 15 major articles on various topics concerned with epilepsy are included. These are individually abstracted in this issue.—*R. D. Weitz.*

2264. Jasper, Herbert H. (*McGill U., Montreal, Canada.*) Electro-encephalography in epilepsy. In *Hoch, P. H., & Knight, R. P., Epilepsy.* (see 22: 2263) p. 181-203.—It is now generally recognized that a most important advance in our understanding of the epilepsies has come from the use of the electroencephalogram. Confirmatory studies by many investigators has established electro-encephalography as an almost indispensable aid in the modern diag-

nosis and treatment of epileptic patients. Of equal importance is its value as an experimental tool for research into the nature of epileptiform disturbances of the brain. The problem of the epilepsies may be considered from several interrelated points of view. They are the biochemical, the physiopathological, the electrophysiological, the neuroanatomical, and the clinical. A few important points which affect the interpretation one is to give to electro-encephalographic findings in epilepsy are presented. The fundamental characteristics of epileptiform activation of nervous tissue are given and the EEG in symptomatic and cryptogenic epilepsy is discussed. Posed is the question of whether each of the electrographic patterns can be identified with a particular form of clinical seizure. The terms "grand mal" and "petit mal" are evaluated with reference to EEG. Finally, psychopathology in epilepsy and epileptoid states is clarified. 58-item bibliography.—R. D. Weitz.

2265. Kallmann, Franz J., & Sander, Gerhard. (New York State Psychiatric Inst., New York.) *The genetics of epilepsy.* In Hoch, P. H., & Knight, R. P., *Epilepsy.* (see 22: 2263) p. 27-41.—The basic principles of inheritance and convulsive disease must be fully understood to interpret the genetics of epilepsy. Confusion has resulted oftentimes due to lack of clear definition of terms and the inconsistent use of the terms. Concerning the type of inheritance in the main group of convulsive disease, the evidence is in favor of a multifactorial genetic mechanism which seems to have a fairly high degree of phenotypical expressivity. The true cases of "idiopathic" epilepsy are always hereditary in the sense that their development in response to a certain combination of precipitating factors depends on the presence of a specific genetic predisposition. 39-item bibliography.—R. D. Weitz.

2266. Kopeloff, Nicholas, Kopeloff, Lenore M., & Pacella, Bernard L. (New York State Psychiatric Inst., New York.) *The experimental production of epilepsy in animals.* In Hoch, P. H., & Knight, R. P., *Epilepsy.* (see 22: 2263) p. 163-180.—Epilepsy has been produced experimentally in the rhesus monkey. Recurrent Jacksonian and generalized seizures have been induced 3 to 9 weeks after the direct cortical application of alumina cream and various immunologic agents. A chronic state of convulsive reactivity has persisted for several years and in one instance for as long as 6 years. Histopathologic examination revealed a meningocortical or cortical cicatrix which in itself did not account for the convulsive manifestations, since lesions of a similar nature were found in monkeys treated with ineffective (control) materials. Electro-encephalographic studies indicated the presence of a primary focus of EEG abnormality. Surgical removal of the primary focus caused a cessation of convulsive attacks. 11 references.—R. D. Weitz.

2267. Landisberg, Selma. (Lynchburg State Colony, Va.) *A personality study of institutionalized epileptics.* *Amer. J. ment. Def.*, 1947, 52, 16-22.—

Twenty relatively high-grade epileptics, 15 males and 5 females, ranging in age from 11 to 71, were evaluated by intelligence, achievement, and personality tests (administered at intervals over a period of 6 months) and by the study and appraisal of their behavioral reactions during the examination periods. Various etiological factors and types of seizure patterns were presented: 13 patients had epilepsy of idiopathic origin; 6 had epilepsy precipitated or presumably induced by exogenous factors after birth; and one had epilepsy of cryptogenic origin. The test analyses and accrued observations indicated that 7 presented the major symptoms of paranoid schizophrenia; 3, of borderline schizophrenia; 3, of psychoneurosis; 2, symptoms of character neurosis; one of psychoneurosis with paranoid components; one of psychopathy; and one exhibited no objective signs of major pathology. In this study no discrete patterns of adjustment were found to typify any special etiological group, and no specific personality pattern was found to typify the institutional epileptics of this group.—V. M. Staudt.

2268. Malzberg, Benjamin. (New York State Dept. Mental Hygiene, Albany.) *The incidence and prevalence of intramural epilepsy.* In Hoch, P. H., & Knight, R. P., *Epilepsy.* (see 22: 2263) p. 42-47.—Statistics are confused regarding the prevalence of epilepsy in the general population. The author evaluates the statistics in this light. His principal conclusion is that there is no satisfactory relation between the statistics of epileptics in institutions and first admissions thereto on the one hand, and the prevalence of convulsive disorders in the community. Bed facilities are insufficient; therefore the number of cases within institutions is automatically limited.—R. D. Weitz.

2269. Merritt, H. H. (Montefiore Hosp., New York.) *Historical review of the pharmacological approach to the treatment of epilepsy.* In Hoch, P. H., & Knight, R. P., *Epilepsy.* (see 22: 2263) p. 15-26.—The history of drugs used in the treatment of epilepsy is traced from the time of their introduction in the middle of the nineteenth century to the present. 29 references.—R. D. Weitz.

2270. Mittelman, Bela. (Cornell U. Med. Coll., New York.) *Psychopathology of epilepsy.* In Hoch, P. H., & Knight, R. P., *Epilepsy.* (see 22: 2263) p. 136-148.—The psychopathology of "essential" epilepsy ("paroxysmal cerebral dysrhythmia") is reviewed together with the evidence on which the psychodynamic constructions are based. The limitations of the problem are stated. The psychopathological processes which may occur in epilepsy can be divided into reactions arising out of continual and out of paroxysmal disturbances. The continual reactions represent hostile, aggressive and self-centering, self-magnifying attitudes and reactions of withdrawal as a consequence of the continual unlocalized organic disturbance. The paroxysmal disturbances may stimulate submissive and masochistic strivings, together with guilt, dependency and expiation. Psychopathology arising out

of the epileptic process proper may become interwoven with strivings and conflicts arising out of relationships with the environment. Marked or limited effectiveness of psychotherapy in about 80% of epileptics and the observations on patients undergoing convulsive shock treatment are confirmatory evidence for the constructions presented. 26 references.—*R. D. Weitz.*

2271. Patton, R. A. (*Western State Psychiatric Inst., Pittsburgh, Pa.*) **Maternal nutritional deficiency and the incidence of sound-induced convulsions in young albino rats.** In Hoch, P. H., & Knight, R. P., *Epilepsy*. (see 22: 2263) p. 204-209.—Despite the diverse experimental situations in which convulsive seizures have been observed there has been a general agreement that the same pathological disorders are under consideration and that sound is the most effective means of precipitating it. Convulsive seizures in human patients do not comprise a single disease entity. The seizure is rather a symptom common to a number of precipitating causes. A large number of apparently pathological conditions may have as one of their symptoms a convulsive attack. Although the final physiochemical cause of convulsive attack is not yet clear, it is probable that controlled methods of inducing seizures in experimental animals will contribute their part to its ultimate understanding. 15 references.—*R. D. Weitz.*

2272. Piotrowski, Zygmunt A. (*New York State Psychiatric Inst., New York.*) **The personality of the epileptic.** In Hoch, P. H., & Knight, R. P., *Epilepsy*. (see 22: 2263) p. 89-108.—Several older investigations, in addition to the author's personal study, with reference to the epileptic personality are evaluated. These studies are all based on the perceptanalytic test of Rorschach. The common responses determined in these studies are enumerated and evaluated. The basic responses are the same as those recorded for the various forms of organic cerebral impairment. In the author's study he attempts to determine a set of signs which might prove helpful in diagnosing the individual case. 30-item bibliography.—*R. D. Weitz.*

2273. Price, Jerry C., Kogan, Kate Levine, & Tompkins, Lois R. (*Baird Foundation Clinic, Beth David Hosp., New York.*) **The prevalence and incidence of extramural epilepsy.** In Hoch, P. H., & Knight, R. P., *Epilepsy*. (see 22: 2263) p. 48-57.—The United States Army rejected draftees in World War I and World War II at the rate of about 5 cases of epilepsy per 1000. This is indicative of some degree of stability in the occurrence of the disorder regardless of the cause. Individuals seldom realize that 7 or 8 out of 10 epileptic persons live in a normal socio-economic world much as anyone else. Treatment must be directed toward the primary disorder and not simply the seizure. A new classification aimed at improving and simplifying treatment is described. 15 references.—*R. D. Weitz.*

2274. Von Briesen, Hans. **A discussion of stress and exhaustion as a primary as well as a contributing**

factor in organic neurological disease. *Milit. Surg.*, 1947, 101, 286-293.—Cases are described showing the organic effects of continuous states of alertness, stress, and fear under wartime conditions. Action dissipates nervous energy and restores equilibrium but continued unexpressed nervous energy for expected situations which do not always occur produce numerous bodily disorders making the individual more susceptible to disease infection.—*G. W. Knox.*

[See also abstracts 2163, 2174, 2191, 2192, 2232, 2275, 2313, 2314, 2334.]

SENSORY DEFECTS

2275. Blair, Mary A. (*Dep't of Public Instruction, Lansing, Mich.*) **A brain-injured deaf child.** In Strauss, A. A., & Lehtinen, L. E., *Psychopathology and education of the brain-injured child*, 193-200 (see 22: 2192).—The techniques used in teaching over a 5-year period a brain-injured (ataxic) deaf boy in speech reading, speech, writing, counting, and social adjustment are described. These are related to the child's characteristic distractibility, forced responsiveness, emotional lability, and perseveration.—*L. A. Pennington.*

2276. Davis, Hallowell. [Ed.] **Hearing and deafness; a guide for laymen.** New York: Murray Hill Books, Inc., 1947. xv, 496 p. \$5.00.—The Editor's foreword states the purpose of this book in these words, "This book is written for the deaf and the hard of hearing and for their families, their parents, their teachers, and their friends. It is written for physicians, for educators, for social workers, and for all who are concerned with the conservation or improvement of remaining hearing or with the approach to normal living for those who have suffered either complete or partial hearing loss." The chapters include The Physics and the Psychology of Hearing, The Anatomy and the Physiology of the Ear, Medical Aspects of Deafness, The Surgical Treatment of Hearing Loss, Tests of Hearing, Hearing Aids, Speech Reading, Auditory Training, Conservation of Speech, Military Aural Rehabilitation, The Psychology of the Hard-of-Hearing and the Deafened Adult, and Vocational Guidance. A selected bibliography is given at the end of each chapter. An appendix includes "seven different collections of words or sentences that are in current use as tests of hearing."—*H. R. Myklebust.*

2277. Feldman, Jacob B. (37 S. Twentieth St., Philadelphia, Pa.) **Use of the telescopic amblyoscope in visual training for defective vision.** *Arch. Ophthalmol., Chicago*, 1947, 38, 494-505.—The use of the telescopic amblyoscope in the program of training of defective vision in patients with varying degrees of ametropia is described. Reading lessons, using the instrument were given to 47 patients, and the training technique is presented. Although the impairment in vision was not startling, "it was usually consistent and ever increasing, with few exceptions, from lesson to lesson."—*S. Ross.*

2278. Gregg, James R. (6560 Normandie Ave., Los Angeles, Calif.) **The philosophy of orthoptics.**

Optom. Wkly., 1947, 37, 1525-1528; 1546.—It is necessary to assume that visual reflexes can be influenced by training and environment; principles of neurophysiology support this point of view.—D. Shaad.

2279. Hardy, LeGrand H., Rand, Gertrude, & Rittler, M. Catherine. (Columbia U., New York.) A screening test for defective red-green vision. *Arch. Ophthal.*, Chicago, 1947, 38, 442-449.—A simple screening test adequate to differentiate between normal and defective color vision is described. The test is based on 18 plates of the "Pseudo-Ischromatic Plates for Testing Color Perception," American Optical Company, 1940. When administered under the standard source of illumination, the test is able to separate persons with normal color vision from those with defective red-green vision. An instruction sheet is included.—S. Ross.

2280. Haynes, Harold M. (4041 Ellis Ave., Chicago, Ill.) The kaleidoscope in visual training. *Optom. Wkly.*, 1947, 38, 1573-1576.—Projected moving patterns produced by a kaleidoscope were demonstrated to aid in the training of amblyopia and to contribute to increased visual skills.—D. Shaad.

2281. Overstreet, Rebecca. State conservation of hearing. *Publ. Hlth Nurs.*, 1947, 39, 212-213.—A summary of the hearing conservation program in Oregon and the results are presented after one year of follow-up of defective hearing cases in Eugene, Oregon. "Of the 144 children who had medical follow-up, 20 had improved, 56 had returned to normal, 16 remained the same, 10 were permanent losses, 37 had medical care but moved prior to the second pure tone test," while in 5 cases medical treatment was still pending. The study indicates that improvement does occur with prompt medical care.—Courtesy of *Child Developm. Abstr.*

2282. Perkins Institution. Special Reference Library of Books Relating to the Blind. Third Supplement to Part I.—Books in English. Watertown, Mass.: Perkins Institution & Massachusetts School for the Blind, 1947. (re-issue) 166 p.—This list was compiled by Mary Esther Sawyer under the direction of Gabriel Farrell. It represents a supplementary list of books and articles concerning the blind in English which are available in the Special Reference Library on the Blind at the Massachusetts School. This third supplement includes additions between 1930 and 1944. Of special interest are the sections on psychology of the blind, the deaf-blind, and education of the blind.—C. M. Louttit.

2283. Shepard, Carl F. Visual handicaps? *Optom. Wkly.*, 1947, 38, 1321-1324.—Statistical evaluation of visual test survey results and school achievement tests shows that those in the upper third of the class tend to make higher scores on the visual test battery.—D. Shaad.

2284. Smith, James W. (1016 Fifth Ave., New York.) The problem of strabismus in childhood. *Amer. J. Ophthal.*, 1948, 31, 85-89.—Conditions favoring the development of strabismus in childhood

are summarized, with emphasis on the importance of early treatment.—D. Shaad.

2285. Stump, N. Frank, Carter, Dorothea. (Bausch & Lomb Opt. Co., Rochester, N. Y.) Visual performances by ophthalmic services. *Optom. Wkly.*, 1947, 38, 1779-1781; 1815-1817.—Statistical comparison of scores in visual test performance showed significant improvement attributed to professionally prescribed glasses and orthoptic training.—D. Shaad.

2286. Stutterheim, N. A. Peripheral and central disturbances of the visual fields; an aspect of diophtalmology. *Brit. J. Ophthal.*, 1947, 31, 721-730.—Three cases with disturbances of field or central vision or both, are presented. The type of field contraction found here has not yet been recognized as a clinical entity. As soon as the condition is recognized as a bi-foveal matter, manifesting its main disturbances in the visual field, the diagnosis is clear and the therapy rational and effective. The treatment was kinetic. Complete cures were effected.—M. A. Tinker.

2287. Wesley, Newton K., & Jessen, George N. The "false macula" in strabismus. *Optom. Wkly.*, 1948, 39, 129-130; 146.—Diagnosis of false macula, or the central association of the macular image of one eye with a peripheral image of the squinting eye, is essential to intelligent orthoptic training of strabismus.—D. Shaad.

[See also abstracts 2020, 2030.]

EDUCATIONAL PSYCHOLOGY

2288. Herrington, George Squires. (U. Denver, Colo.) The status of educational sociology today. *J. educ. Sociol.*, 1947, 21, 129-139.—A comparison of university offerings in educational sociology in 1926, and current offerings, shows a decline in the number of institutions giving educational sociology. There may be a movement toward the inclusion of educational sociology data in general education courses. Present courses have different emphases, including more stress on school-community relations. Implications and recommendations are included.—H. A. Gibbard.

2289. Mathie, G. P. Summaries of researches reported in degree theses. *Brit. J. educ. Psychol.*, 1947, 17, 170-171.

2290. Risk, Thomas M. (U. South Dakota, Vermillion.) Principles and practices of teaching in secondary schools. (2nd ed.) New York: American Book Company, 1947. viii, 728 p.—This is intended for use as a textbook during the pre-service training of secondary school teachers, but it would be valuable for many teachers in service. In preparing this new edition the author has retained the same organization of content used in the original edition published in 1941. The book is divided into 5 major units: "Some Fundamental Problems of Teaching"; "Learning Activities and the Attainment of Desired Outcomes"; "The Organization of Courses of Instruction and Units"; "Methods of Planning and Organizing

Classroom Activities"; and "Stimulating and Directing Classroom Activities and Measuring Outcomes." The first 2 units present some fundamental principles of education and learning. The last 3 units show how these principles are applied in the work of teachers—from the organization of courses of instruction to classroom management and discipline. Changes incorporated in this revision are clarifications of parts of the text material; additions of new illustrations, diagrams, and recent data; and list of up-to-date references and materials.—*R. C. Lonsdale.*

2291. Rugg, Harold. (*Columbia U., New York.*) *Foundations for American education.* Yonkers, N. Y.: World Book, 1947, xxii, 826 p. \$5.00.—Education in a democracy must be child and society centered; it must be based on a philosophy of experience. In this systematic appraisal of the foundations of American education the author critically reviews the developments of the past half century in 4 major areas: psychology, sociology, esthetics, and ethics. Two schools of thought are found in all of these—the mechanical, "thing" group, and the organismic, "force" group. The author's position is with the second of these. Five major parts of the book are devoted to historical and critical appraisals of: (1) psychology with Pierce, James, and Dewey as the key figures; (2) sociology with Veblen as the innovator; (3) esthetics of creative expression illustrated in the dance, and in architecture; (4) ethics in a changing society and the influence of O. W. Holmes, Jr.; (5) education, Dewey and the progressive movement and their antagonists.—*C. M. Louttit.*

2292. Schonell, Fred J. *The development of educational research in Great Britain. Part I. Early history and later difficulties.* *Brit. J. educ. Psychol.*, 1947, 17, 131-139.—The development of educational research in Great Britain, initiated in the first decade of the century and spanning the last 40 years is a record of steady but uneven progress. Early interest extended in the main to the nature of intellectual processes and the construction and use of tests. Significant influences in the growth of research were the organization of a number of national institutes for educational and applied psychology, the substantial contributions of such individuals as Spearman and Ballard, and the founding of 2 journals for reporting educational research. Mixed attitudes toward experimental education of conservatism on the one hand, and complacency on the other, have affected, both favorably and adversely, the progress of educational research. Among the detrimental influences have been the lack of research grants and the absence of a central co-ordinating agency.—*R. C. Strassburger.*

2293. Woodruff, Asahel D. *The psychology of teaching.* (2nd ed.) New York: Longmans, Green, 1948. xi, 272 p. \$3.00.—"Educational psychology is that branch of general psychology which deals primarily with problems of learning, considered from the standpoint of the characteristics of the learner, the nature of what is to be learned, and the process

by which learning takes place." The author covers the following areas: The nature of human behavior, the nature and varieties of learning, factors which modify learning, adjustment and maladjustment, and evaluation and counseling. It is a short, condensed, basic text in educational psychology which sets forth those facts on which good teaching rests. Teacher maladjustment is discussed in the book. (see 20: 1705).—*A. W. Ahrens.*

[See also abstracts 2084, 2088.]

SCHOOL LEARNING

2294. Camden, Sister St. Mary Esther. *A comparative study of the relative effectiveness of two types of training in how-to-study upon knowledge of study skills and upon achievement in four subject-matter fields at the ninth grade level.* In *Fordham U., Dissertations accepted for higher degrees . . .*, New York, 1946, 13, 50-55.—Abstract of Ph.D. thesis.

2295. Garrett, A. B. (*Ohio State U., Columbus.*) *Proficiency in general chemistry; a method of integrating the high school and college program.* *J. chem. Educ.*, 1948, 25, 24-26.—The program of proficiency examinations in chemistry in operation at the Ohio State University is described. Experience between 1939 and 1945 showed that 80% of students given an examination proficiency grade for the first course in chemistry made A's or B's in the next following course as compared with only 28% for all other students. Only 1% of the examination students failed, while 11% of those taking the first chemistry course failed. The content of the proficiency examination is indicated.—*C. M. Louttit.*

2296. Geck, Francis J. (*U. Colorado, Boulder.*) *The effectiveness of adding kinesthetic to visual and auditory perception in the teaching of drawing.* *J. educ. Res.*, 1947, 41, 97-101.—Students in their second term of freehand drawing were divided at random, and one half were allowed to examine assigned studies (4 different plaster casts of heads) kinesthetically for 2 minutes while blindfolded. The other half had no such opportunity. The studies were then put in place, instructions were given, and all students were asked to make the best drawing possible. The drawings were then graded by 3 members of the Department of Fine Arts who did not know the conditions under which they were produced or for what purpose. In all but one instance the combined grade of the judges was higher for the group of students who had kinesthetic perceptions in addition to the visual and auditory ones.—*M. Murphy.*

2297. Grime, Herschel E. *Aptitude and ability in elementary algebra.* *Sch. Sci. Math.*, 1947, 47, 781-784.—A study of 2615 pupils reveals a correlation of .70 between the Iowa Algebra Aptitude Test administered in Grade 8A and high school algebra grades. The addition of a measure of mental ability did not appreciably affect the correlation.—*G. S. Speer.*

2298. Helseth, Inga Olla. (Coll. William and Mary, Williamsburg, Va.) How large should a class be? *Childh. Educ.*, 1948, 24, 214-218.—After pointing out that class size in itself makes little difference, the author discusses various other factors in wholesome development of children, making suggestions for utilization of the individual teacher, the whole faculty, the parents, the children, and space, tools and materials.—G. H. Johnson.

2299. Knapp, Clyde. (U. Illinois, Urbana.) Achievement scales in six physical education activities for secondary school boys. *Res. Quart. Amer. Ass. Hlth*, 1947, 18, 187-197.—Six physical activities (push-ups, squat jumps, set-up, pull-ups, potato race, V-lift) were used to form a brief battery of subtests which were combined as a measure of physical fitness and to motivate secondary school boys in the physical education program. 23 Wisconsin secondary schools provided some 20,000 test records made by untrained boys. Six Wisconsin secondary schools supplied records showing performances of 2405 boys before and after 2 months' training in the physical fitness programs. Based on the 20,000 records of the untrained boys and corrected for expected progress on the basis of the 2405 test-retest records, the scales represent performances that might be expected of boys in reasonably good physical condition. All activity but the potato race showed improvement after 2 months of training. 16 references.—M. A. Seidenfeld.

2300. Krous, George T. (John Burroughs Sch., Fresno, Calif.) Visual analysis investigation as part of a reading program. *Optom. Wkly*, 1948, 39, 8-12.—231 grade school pupils were examined on a visual screening test; it is pointed out that the Snellen acuity chart alone is inadequate to determine visual efficiency, and that a more complete screening test may contribute to higher achievement scores when visual aids are found necessary.—D. Shaad.

2301. Ledbetter, Frances Gresham. (Woman's Coll., U. North Carolina, Greensboro.) Reading reactions for varied types of subject matter: an analytical study of the eye movements of eleventh grade pupils. *J. educ. Res.*, 1947, 41, 102-115.—Eye movements of 60 eleventh grade pupils were analyzed while they read five 300 word selections from the following subject matter fields: English prose, English poetry, mathematics, science, and the social studies. The selections were of approximately the same difficulty in vocabulary, sentence length, and sentence structure. A comprehension test was designed for each selection. Eye movements were photographed by ophthalmograph. The greatest difficulties were encountered in reading the poetry and the mathematics. Although the results were not conclusive they suggested that the students' best reading as indicated by eye movements was done in the reading of the second hundred words. A low but positive correlation was found between reading speed and comprehension. 32 references.—M. Murphy.

2302. Macauley, William J. The difficulty of grammar. *Brit. J. educ. Psychol.*, 1947, 17, 153-162.—Simple tests involving the recognition of easier parts of speech were administered to groups of pupils at the primary level (about 12 years of age) and in the junior secondary and senior secondary schools. The results showed that few primary pupils and junior secondary pupils attain a passing standard of 50%, while only the most capable of the senior secondary students reach this level. At the end of a 3-year senior secondary course the median pupil is still below this standard. Respecting the various parts of speech, least difficulty is experienced with the concrete noun. Simple finite verbs are generally recognized, and pronouns are next in the order of difficulty. Adverbs and adjectives show very low recognition scores. Although scores increase with age and schooling, greater maturity than is normally found in the primary, and greater intelligence than that of the junior secondary school level is required to attain a passing standard in grammar.—R. C. Strassburger.

2303. Mayfarth, Frances. [Ed.] Children and music. Washington, D. C.: Association for Childhood Education, 1948. 32 p. 50¢.—The contributions of 4 authors point out how music can be effectively taught to, and experienced by, pre-school and elementary school pupils. James L. Mursell gives the manner in which music should be brought to the children. Helen Christianson deals with teacher-pupil relationships. Music with the two to nine age groups, and music with the nine to twelve group are discussed by Beatrice Landeck and Helen L. Schwin respectively. Methodology of the singing, listening, playing, rhythmic and creative experiences is presented in a succinct manner.—A. W. Ahrens.

2304. Park, George E. (303 E. Chicago Ave., Chicago, Ill.) Reading difficulty (dyslexia): from the ophthalmic point of view. *Amer. J. Ophthal.*, 1948, 31, 28-34.—133 cases of dyslexia were studied with regard to psycho-physiologic factors, ocular and oculomotor status, ocular dominance, phorias, and ductions. The multiplicity of factors which may contribute to dyslexia is emphasized; orthoptic treatments were recommended for 52% of the cases studied.—D. Shaad.

2305. Root, F. M., & Root, D. O. Tachistoscopic training in schools. *Optom. Wkly*, 1947, 38, 1925-1927.—A trial of tachistoscopic training for a small group of school children indicates that such training can be of greater value if administered in a professional office with more complete individual case studies.—D. Shaad.

2306. [Various.] Your reading problems; practical helps from experienced teachers. Darien, Conn.: Educational Publishing Corp., 1947. 76 p.—This collection of 61 short articles by as many different authors covers the whole field of reading as it relates to elementary school problems. The reports are based on actual classroom experiences and include such topics as pre-reading and reading readiness, classroom techniques in teaching reading,

evaluation of reading materials, reading disabilities and remedial reading, teaching of reading to special groups, and the library in teaching reading.—C. M. Louttit.

[See also abstracts 1937, 1944, 2055, 2056, 2077, 2087, 2097, 2114, 2127, 2129, 2381, 2382.]

INTERESTS, ATTITUDES & HABITS

2307. Finger, Marie. (Knox Coll., Galesburg, Ill.) *The social attitudes of freshmen women.* In Hamrin, S. A., & Endicott, F. S., *Improving guidance and personnel services through research*, 79-88. (see 22: 2137)—Beginning with the assumption that teachers must have sound, intelligent social attitudes adequately to fulfill their responsibility for forming student attitudes, a study was made of the differences in attitudes relating to "liberalism-conservatism" held by teachers and freshmen teacher trainees. Attitude questionnaire responses collected in 1936 of about 3700 teachers in 43 states were compared with responses collected in 1938 of 100 freshmen women (median age 18) in an Illinois teachers college. Highest agreement (50% or more of each group voted the same way) obtained with respect to such issues as the purpose of education, present-day capitalism, the class struggle, government ownership, and related items. Disagreement occurred in several areas, including items dealing with agriculture, taxes, the Chamber of Commerce, strikes, housing, with a greater proportion of the students in most cases defending a more liberal position than the teachers. The author infers that her findings reveal "not only an insufficient awareness of social, economic, and political issues, but also confusion and inadequate knowledge." She concludes that if potential and present teachers are to fulfill their obligations to lead in the intelligent discussion of vital social issues, they must learn more, be protected by greater academic freedom, "be taught which books and periodicals are the best, meet students' needs not only in the school but outside as well, and accept the leadership in directing students to enlightened attitudes."—P. Ash.

2308. Krueger, William C. F. (Wayne U., Detroit, Mich.) *Student's honesty in correcting grading errors.* *J. appl. Psychol.*, 1947, 31, 533-535.—In 3 experiments, psychology students were asked to correct grading errors on test papers. Before the students had knowledge of the experimental set-up, approximately 90% left the grade too high when the correcting errors were in their favor, and about 95% raised their grade when it was to their disadvantage. However, after they learned that the experiment was a test of honesty, 99% lowered their grade when it was too high, and 99% also raised it when it was too low.—C. G. Browne.

2309. Powell, Margaret. (Sam Houston State Teachers Coll., Huntsville, Texas.) *An analysis of relationships existent between health practice, adjustment, and physical performance of freshmen women.* *Res. Quart. Amer. Ass. Hlth*, 1947, 18,

176-186.—A representative sampling of entering freshmen women at Sam Houston State Teachers College was given tests to measure "health practice, physical performance ability, and adjustment." The 3 tests used were John's Health Practice Inventory, Bell's Adjustment Inventory, and the Physical Performance Level Battery, compiled by the Research Committee of the National Section on Women's Athletics. Partial and multiple correlations are included for all the tests used. As a result of her application of these tests, Powell concludes that "Within the limitation of the problem, no marked relationship exists between physical performance ability, health practice, and adjustment." 33 references.—M. A. Seidenfeld.

2310. Smucker, Orden. (Michigan State Coll., E. Lansing.) *The campus clique as an agency of socialization.* *J. educ. Sociol.*, 1947, 21, 163-168.—A study of dormitory cliques showed that the clique is more influential in behavior determination than the larger dormitory or campus units. Clique formation entails the attracting together, on an informal basis, of individuals with similar values and interests. Cliques provide primary group contacts. Problems created by cliques are noted.—H. A. Gibbard.

2311. Sterner, Alice P. *Radio, motion picture, and reading interests; a study of high school pupils.* *Teach. Coll. Contr. Educ.*, 1947, No. 932. viii, 102 p.—The leisure language activities of 372 high-school pupils were determined by check lists, diary records of radio listening, and monthly records of voluntary book reading. The relationships between and among the following types of scores were determined by correlational analysis: media (comic strips, magazines, radio, movies, etc.), interests (adventure, humor, and love), factors in adolescent life (sex, grade, age, intelligence, etc.). Among the many findings: it is the interest rather than the medium which attracts pupils to these leisure language activities; one cannot predict how much time a student will devote to one medium from a knowledge of the pupil's activity in another medium; factors such as age, sex, intelligence, etc., are only slightly related to youthful choices of interests, media, or specific titles within media. The educational implications of these findings are discussed. 102-item bibliography.—G. G. Thompson.

2312. Young, Florence M. (U. Georgia, Athens.) *The incidence of nervous habits observed in college students.* *J. Personality*, 1947, 15, 309-320.—Each subject in several groups of 20 was observed for 5 minutes as to manifestations of nervous habits which were divided into 4 categories; oral, nasal, hirsutal, and facial. The results showed that oral scores were highest and nasal-hirsutal scores were lowest. Frequency of nervous habits tended to be higher in the war years than in prewar years in most subjects. Oral habits were greater among girls than boys but boys had higher scores in each of the other categories. 6 references.—M. O. Wilson.

[See also abstract 2201.]

SPECIAL EDUCATION

2313. Collis, Eirene. (London County Council, Eng.) Pioneer work with cerebral palsy. *Ment. Hlth, Lond.*, 1946, 6, 35-36.—In 1942, the first school for children with cerebral palsy was established in England. The principles and practices of the school are patterned after the pioneer work of Dr. Phelps in America. There is increased interest in the work of the school so that the future holds promise of more adequate facilities and staffing.—M. E. Wright.

2314. Fox, J. Tylor. (Lingfield Epileptic Colony, Eng.) Residential schools for epileptic children in England. *Ment. Hlth, Lond.*, 1947, 7, 8-11.—Reprint of 21:2655.

2315. Lewin, Herbert S. The way of the Boy Scouts; an evaluation of an American youth organization. *J. educ. Sociol.*, 1947, 21, 169-176.—The Boy Scouts of America fosters frontier ideals, like self-reliance and individual initiative, which have lost much of their meaning in our highly interdependent society. A democratic society must provide for self-expression and social intercourse. Scouting falls short with respect to policies of social participation and the building of understanding of national and international issues. The scouting program should be broadened and youth should participate more in its formulation.—H. A. Gibbard.

2316. Stevens, Harvey A. (Wisconsin Dept. Public Instruction, Madison.) The administrator's responsibility in the education of the mentally handicapped child. *Amer. J. ment. Def.*, 1947, 52, 71-77.—The responsibilities of the administrator as they relate to the institutional educational program are described by the writer. He states that considerable impetus might be given a school program if the administrator would consider that: (1) For effective group work there must be intelligent leadership. (2) Leadership is meaningless unless it has direction, and that direction must be furnished by a philosophy of education suited to the several grades of mentally handicapped children. (3) The curriculum is dependent upon the objectives set up for the school based primarily upon the administrator's philosophy. (4) A well-trained and well-adjusted teaching staff is vital to every school. The administrator must exercise care and judgment in selection of staff. (5) The type of school plant will affect the curriculum and the teachers. (6) The teaching staff needs constant in-service training, if any degree of success in the total training program is to be achieved. (7) Cooperation with the state department of public instruction is desirable and (8) The educational program must be adequately financed to meet all the needs of the children committed to the institution.—V. M. Staudt.

2317. White, Exie P. Bibliography and evaluation of books and pamphlets on alcohol education. *Univ. Neb. Publ. Contr. Educ.*, No. 23, 1947. 35 p. 35¢.—A select list of 23 books has been critically read and a general list of 24 books and 49 pamphlets has been analyzed in terms of major topics of the educational problems concerning the use of alcohol.

Each of the references has been analyzed and indexed under a number of subject headings referring to pages where each topic is discussed. Each of the volumes read is evaluated in terms of its satisfactoriness as a reading reference at various educational levels.—C. M. Louttit.

[See also abstracts 2119, 2186, 2192, 2275.]

EDUCATIONAL GUIDANCE

2318. Baggailey, Andrew R. (Harvard U., Cambridge, Mass.) The relation between scores obtained by Harvard freshmen on the Kuder Preference Record and their fields of concentration. *J. educ. Psychol.* 1947, 38, 421-427.—Analysis of the records of 185 students revealed some differentiation of Kuder scores between those concentrating in different academic fields. The fields of concentration were divided into 2 groups, one primarily scientific and the other including the languages, arts, and social sciences. Weights were assigned to the various Kuder scales in such a way as to accentuate the score differences between the groups. The discriminant function mean for each field of concentration was then calculated. It is suggested that the counseling of students on the basis of their Kuder Preference Records may help minimize academic dissatisfaction.—E. B. Mallory.

2319. Bedell, Ralph C. [Ed.] Basic guidance . . . suggestions for Nebraska schools. State Capitol, Lincoln, Neb.: State of Nebraska, Dept. of Vocational Education, 1947. viii, 70 p. \$1.00.—The chief concern of this bulletin is to provide methods by which to establish and maintain adequate guidance services in the small schools. The various interrogative chapter titles—(1) Why Guidance? (2) What does Guidance do? (3) Who is Responsible [for Guidance]? (4) How does it Work? (5) How do Schools Accomplish Guidance? (6) How Good is your Guidance Program?—are each developed in a comprehensive yet concise manner. Criteria for the evaluation of current practices are listed as an aid for the stimulation and improvement of guidance services.—A. W. Ahrens.

2320. Graver, Harold A. Student personnel needs in a professional school. In Hamrin, S. A., & Endicott, F. S., *Improving guidance and personnel services through research*, 89-101. (see 22: 2137)—A valid personnel program is defined as one that (1) places emphasis on student needs, (2) utilizes proper motivation, (3) begins with analysis of the problems and capacities of the individual, (4) undertakes to direct the student to experiences suited to his needs, (5) attempts to advise rather than command, (6) is preventive as well as remedial, (7) is a continuous process, and (8) can be evaluated. The author presents several characteristics of professional schools in this context. He finds, among other things, often a lack of motivation, too great reliance on scholarship, instruction that frequently does not take individual differences into account, and slowness in recognizing personnel needs. Research is urged to

determine what student personnel needs exist, and areas of research are blocked out: student financial problems, vocational problems, educational problems, personal and health problems. The application of research to specific situations in one institution in these areas is briefly described, and some of the beneficial results indicated. The author concludes that research techniques were of value in pointing out significant problems and in yielding implications for the improvement of the personnel program. An adequate personnel program is urged as a vital part of the program in professional education.—P. Ash.

2321. Halmos, Paul. *Psychiatric aid in the grammar schools.* *Ment. Hlth, Lond.*, 1947, 7, 6-7; 11.—The grammar school can not assume responsibility for the home developmental background of its students, or for the social disorganization of the larger society of which it is a part. Its role, however, is not merely one of negative omission, such as not adding to nor aggravating the problems which are already existent in their students. There is a positive responsibility for incorporating the research and clinical findings of education and psychology into its teacher-training and classroom programs. There is necessary an integration of the educational school program with the general mental hygiene plan of the community; an instigation of reforms within its own organizational structure; and a more direct role in the education of the general public to the problems of psychological adjustment. The author criticizes the British Grammar School system for so sadly lagging behind the United States in accepting the importance of mental prophylaxis as an essential ingredient of the teaching process.—M. E. Wright.

2322. Peebles, Clarence M. (*Northwestern U., Evanston, Ill.*) *Counseling precollege students in the secondary schools.* In Hamrin, S. A., & Endicott, F. S., *Improving guidance and personnel services through research*, 71-78. (see 22: 2137)—The purpose of this study was to determine the nature of the guidance which college students should have to help them make a satisfactory adjustment to college. In group sessions, 485 freshmen in 6 selected Midwest colleges completed a total of 1841 questionnaires (4 different instruments). An analysis of the responses indicated the variation in prevalence of precollege guidance facilities and information, showed how students evaluated the relative importance of various groups of pre-college advisors (parents, high school advisors and teachers, brothers and sisters, and college representatives) and afforded an estimate of the use students made of other sources of guidance such as books and library materials. Parents were found the most helpful; written sources of information were not known about or used very little. The author outlines a recommended program of pre-college guidance in the secondary school, and offers a list of factors to be considered by the counselor in predicting college success. He urges an active program that goes out to the student—"it is not sufficient to set up pre-

college guidance services and then sit back and wait for students to take advantage of them."—P. Ash.

2323. Pring, Eva L. (*Oak Park (Ill.) Township High School.*) *Meeting pupil needs through the classroom.* In Hamrin, S. A., & Endicott, F. S., *Improving guidance and personnel services through research*, 15-28. (see 22: 2137)—The manner in which classroom teachers meet the varied needs of students in selected high schools was studied to determine what good and what unusual and outstandingly successful methods were employed. As a basis for the study, 7 areas of needs were defined: educational, social and moral, vocational, health, recreational, emotional and personality, and preparation for family living. 133 teachers from 46 high schools were interviewed individually, and group interviews were held with 122 groups of students representing 113 of these teachers (a total of 751 students being included in the group interviews). 75 to 100 different effective practices are presented for each area of needs. The investigation also showed that, although many excellent practices existed, relatively few of them were commonly practiced. The writer concludes that the study "points to the vital importance of classroom teachers who hold a broad social vision of their function," and that the personality of the teacher has a subtle and pervasive influence that is basic to student progress. Recommendations designed to facilitate and improve recognition and meeting of student needs are made.—P. Ash.

2324. Stout, Irving W. (*Milwaukee (Wisc.) Public Schools.*) *Administrative practices in meeting pupil personnel needs.* In Hamrin, S. A., & Endicott, F. S., *Improving guidance and personnel services through research*, 41-46. (see 22: 2137)—The administrative practices relating to the meeting of pupil personnel needs were surveyed in the schools of 10 cities with populations over 300,000. 9 trends, which are advocated as desirable practices are identified. They were: the division set up to better meet pupil-personnel needs should be a service division; wherever 2 or more services are offered they should be coordinated; the concept of guidance should be broadened; an increased emphasis on guidance in elementary and junior high schools is noted; the visiting teacher is being used more widely; psychological services are being used increasingly; steps are being taken to coordinate pupil services and curriculum planning; the home-teacher visitor is being used; someone on the Superintendent's staff is appointed to serve as an aid to parent groups. 3 areas for further study are pointed out: the development and use of occupational information; the handling of the retarded child in the elementary school; and the handling of the retarded child between the ages of 13 to 16 years.—P. Ash.

[See also abstracts 2136, 2144, 2203.]

EDUCATIONAL MEASUREMENT

2325. Alexander, W. P. *Symposium on the selection of pupils for different types of secondary*

schools. *Brit. J. educ. Psychol.*, 1947, 17, 123-130. —Assignment of pupils to the different types of secondary schools should be based upon objectively determinable intellectual and temperamental qualities assessed in respect to the professed vocational aims of the pupil. Little stress should be placed upon social considerations for practical reasons. In evaluating intellectual factors distinction should be made between acquired knowledge and innate ability, with greater weight given to the latter. Among personality traits such factors as persistence and stability offer a fruitful basis for the allocation of pupils, particularly in the borderline cases. Systematic ratings by teachers and psychologists should be used to supplement and check the objective test data. It is imperative to avoid final classification of all pupils at 11+, and opportunity for change within the secondary school structure should exist until the age of 13+. The necessity for trained personnel to administer the chosen procedures on a local area basis is fundamental to the success of the entire program.—*R. C. Strassburger.*

2326. American Council on Education. (*Washington, D. C.*) **Manual for the American Council on Education cumulative record folders for schools and colleges.** Washington, D. C.: American Council on Education, 1947. iii, 28 p. 30¢.—Cumulative record forms have been prepared for all ages from the first grade through college. The purpose of these forms is to facilitate the perpetuation of accurate and significant information necessary for sound placement and guidance practices. Directions are given for the use of the record forms and folders and for the transfer of a pupil's record to an institution or employer. Samples of various personality and scholastic records appear in the appendices. An extensive bibliography is included.—*G. C. Carter.*

2327. Bolton, Floyd B. **Value of several intelligence tests for predicting scholastic achievement.** *J. educ. Res.*, 1947, 41, 133-138.—The relative value of verbal and non-verbal tests in predicting high school achievement was studied. In the first investigation the Otis Gamma, the Terman-McNemar, and the California Short-Form were used. Use of the California Non-Verbal IQ with the IQ from one of the verbal tests was found to facilitate educational guidance, but even with two IQ's the standard error of estimate was high. In the second investigation the Pintner Non-Language test was used. This test proved useful in predicting achievement in safety, health, mechanical drawing, printing, English, clothing and foods.—*M. Murphy.*

2328. Bonnardel, R. (*l'École Pratique des Hautes Études, Paris.*) **Application de la méthode d'analyse factorielle de Thurstone à l'étude de la notation des copies d'examens.** (Application of Thurstone's method of factor analysis to the study of examination marks.) *Travail hum.*, 1946, 9, 150-170.—The object of this exploratory study was to analyze the "subjective factor" which enters into evaluation of written examinations. The material was obtained in an industrial study center. 7 examiners partici-

pated in the research project. They rated, on a scale from 0 to 10, a large number of papers with reference to appearance, style, comprehension, and originality of ideas. A total mark was obtained as a weighted sum of the four components; weights of 1, 1, 3, and 2 were used. The intercorrelations between ratings were factor analyzed. In series A only one important factor could be established, regarded as a "halo" of the general impression on the part of the examiner. In series B and C factors labelled as "appearance" and "style" were present. Bonnardel adds a useful footnote: "In no way do we consider these factors as entities. To us they simply represent provisional chapter headings useful for a rational classification of phenomena."—*J. Brožek.*

2329. Lobaugh, Dean. **Girls and grades; a significant factor in evaluation.** *Sch. Sci. Math.*, 1947, 47, 763-774.—From a review of the literature it is shown that high school boys and girls consistently obtain similar scores on intelligence tests, and that boys obtain significantly higher scores on standardized achievement tests, but that girls receive higher school grades and a disproportionate share of academic honors. Suggested reasons for this discrepancy are discussed, and it is finally concluded that girls receive higher grades than boys because most teachers are women, grades are an expression of an overall rating of the individual rather than an evaluation of achievement, and that girls, who are more mature than boys of the same age, are also more conforming and more accepting of teacher regulations.—*G. S. Speer.*

2330. Wigforss, Frits. **Ett försök med skolmognadsprov.** (School placement by use of tests.) Stockholm: Svend Läraretidnings Förlag, 1946, 126 p. \$3.50.—This study was carried on in 1944, in Sweden, in a folkschool, and with all school children in attendance. Children were divided into groups according to age and advancement. The experiment included reading, reasoning, and intelligence testing. Changes in reading procedure and in reasoning were made, including reading readiness tests, use of pictures for word recognition, as opposed to alphabet only. Pictures proved to be the superior method of presentation. Pupils were separated into classes designated as "normal," "emotionally maladjusted," and the gifted, normal, and dull. The amount of learning and of work covered, greatly increased for all groups, and interest in work likewise increased. Many questions arose in the series of experiments which the author hopes to investigate and to answer in a later experiment and publication.—*O. I. Jacobsen.*

2331. Young, Paul A. (*Evanston (Ill.) Township High School.*) **Evaluating vocational guidance in the high school.** In Hamrin, S. A., & Endicott, F. S., *Improving guidance and personnel services through research*, 29-40. (see 22: 2137)—Starting from the proposition that "the fundamental thesis of personnel guidance is to give attention to the specific needs of individuals by helping them solve their own problems and overcome their own frustrations," the writer de-

scribes a 4-year research undertaking whose general objective was to expand and develop the guidance program of the Evanston Township High School. Some of the specific developments are discussed in the context of their effect on counseling. Among these developments were: the establishment of a Central Testing Bureau, a psychological clinical service, additional guidance services for the orientation of new students, the use of periodic surveys to uncover student needs and the development of counseling programs designed to meet these needs, the development of a guidance reward system, and the establishment of various supplementary aids, such as Career Study Clubs. The writer saw a new philosophy of counseling evolve as a result of the research experience. He urges that, living in a world of change, we must keep up to date in our services to youth by constant study and planning.—P. Ash.

[See also abstracts 1937, 1950, 1968, 2046, 2148, 2150, 2308.]

EDUCATION STAFF PERSONNEL

2332. Leeds, Carroll H. (*Furman U., Greenville, S. C.*), & Cook, Walter W. The construction and differential value of a scale for determining teacher-pupil attitudes. *J. exp. Educ.*, 1947, 16, 149-159.—A teacher-pupil inventory was developed to measure the attitudes of teachers toward pupils. A reliability coefficient of .909 was obtained with the revised form of this inventory. A multiple correlation of .595 was secured between this inventory and 3 validating criteria (pupils', principals', and research worker's ratings) in a population of 100 unselected teachers. Little relationship was found between inventory scores and personal factors relating to the teachers. However, teachers below 40 years of age scored significantly higher than older teachers. Girls reacted more favorably toward teachers than boys; pupils receiving higher grades also reacted more favorably toward their teachers than those children receiving lower grades. "Regardless of sex or grade received, there was very evident agreement among pupils as to what teachers were liked or disliked."—G. G. Thompson.

[See also abstract 2307.]

PERSONNEL PSYCHOLOGY

2333. Parks, Donald S. (*U. Toledo, O.*) Survey of the training and qualifications of personnel executives. *Personnel J.*, 1948, 26, 256-266.—Executives from 84 companies filled out a questionnaire designed to determine the qualifications of personnel executives and the types of education considered desirable for students wishing to enter the personnel field. The present personnel executives had a great variety of previous experience. Most of those from the larger companies are college graduates. Most companies prefer men with previous work experience. Recent graduates are usually given plant experience before being taken into the personnel department.

Some companies prefer personnel employees with a liberal arts or science background followed by specialized graduate training or training while working. The 5 subjects considered most frequently by the executives as desirable in a personnel management curriculum are: Psychology, Public Speaking, Personnel Management, Economics, and Labor Relations Legislation.—M. B. Mitchell.

2334. Seidenfeld, Morton A. (*Nat'l. Foundation for Infantile Paralysis, New York.*) Psychological elements in work interference from physical disability. *J. consult. Psychol.*, 1947, 11, 326-333.—91 males and 43 females who had infantile paralysis and after recovery succeeded in securing employment were interviewed by a group of trained hospital interviewers. Their capacity to carry on effectively on a job is indicated. The evidence suggests the need for more adequate follow-up of the patient after job placement so that factors producing work interference can be corrected. Five recommendations are made for reducing work interference.—S. G. Dulsky.

[See also abstracts 1972, 2059, 2328.]

SELECTION & PLACEMENT

2335. Anderson, Rose G. (*The Psychological Corporation, New York.*) Test scores and efficiency ratings of machinists. *J. appl. Psychol.*, 1947, 31, 377-388.—Supervisors and assistant supervisors rated 174 machinists on 4 job traits—quality of performance, quantity of performance, rate of learning, and job knowledge. All men rated were administered the Adult Placement Test (mental alertness test developed by the author), the Bennett Mechanical Comprehension Test, the Revised Minnesota Paper Form Board Test, and the MacQuarrie Mechanical Aptitude Test. The Adult Placement Test alone, or combined with other tests, was most discriminating in segregating machinists according to the ratings.—C. G. Browne.

2336. Bonnardel, R. (*l'École Pratique des Hautes Études, Paris.*) Étude de classifications de métiers au moyen des méthodes statistiques. (A study on classification of occupations by statistical methods.) *Travail hum.*, 1946, 9, 139-149.—The purpose of the study was to provide a rational basis for differential wage rates in a body-and-fender factory. Five men, well acquainted with the whole range of the 52 work tasks, rated each job with respect to 17 characteristics (occupational qualifications) which, in turn, were broken down to 5 components including length of the training period, mechanical skill, previous experience, complexity of the job, dexterity and precision of movements; responsibility; physical conditions; and occupational hazards. The clerical and administrative jobs were rated, in addition, with respect to the "mental" and "moral" requirements. The intercorrelations between the ratings by the 5 individuals varied from 0.38 to 0.74, with a mean of 0.59. By means of Spearman's formulae the saturations (r_{12}) of the ratings of a

given individual (i) with the factor (g) common to the set of all the ratings were determined and used for obtaining the optimal weights which were attached to the individual estimates in arriving at the final "value" of a job.—J. Brožek.

2337. Bonnardel, R. (*l'École Pratique des Hautes Études, Paris.*) Étude sur l'évaluation de l'aptitude professionnelle de la maîtrise subalterne et sur les jugements analytiques portés sur différents aspects du comportement de l'homme. (Study on the evaluation of the occupational fitness of foremen and on rating of different aspects of human behavior). *Travail hum.*, 1946, 9, 178-194.—Ratings were made by 5 competent judges for 12 foremen of 4 personality areas: Moral value (discipline, morality, professional conscience, orderliness, loyalty to the firm); supervisory value (energy, sense of justice, responsibility, organizational talent, social sense); professional value (capacity to adapt, competence, experience, activity, health); and personal value (training, dynamism, self-dedication, common sense, sociability). In addition, an intelligence rating was obtained. There was a high correlation between the ratings assigned by the judges to supposedly independent personality areas (mean $r = 0.83$, range from 0.68 to 0.92), demonstrating empirically the importance and magnitude of the "halo effect" of the global impression and the questionable merit of analytical ratings. On factor-analyzing the data, ratings of the 4 personality areas were highly saturated by the "intelligence factor"; in the case of the "personal value" it contributed 76% of the variance.—J. Brožek.

2338. Cook, P. H. (*Dept. of Labour and National Service, Canberra, Australia.*) An experiment in the selection of administrative staff. *Bull. industr. Psychol. Personnel Pract.*, Melbourne, 1947, 3(2), 14-27.—Selection of an administrative officer to supervise junior and clerical staff was made by evaluating written applications, interview by 3 selectors, a written test, and an intelligence test. It is concluded that the written application cannot be used as a reliable and valid assessment, and that the interview is valuable under certain specified conditions and when supplemented by appropriate tests.—C. G. Browne.

2339. Goodman, Charles H. (*Radio Corp. of America, New York.*) The MacQuarrie Test for Mechanical Ability. III. Follow-up study. *J. appl. Psychol.*, 1947, 31, 502-510.—Follow-up of 329 female radio assembly workers reveals that the MacQuarrie Test for Mechanical Ability was not a satisfactory discriminatory device for selection purposes. At the end of 10 months, 193 of the subjects were no longer with the company—158 leaving for personal reasons and 35 for company reasons. While the Taylor-Russell selection ratio proved more successful in selecting satisfactory workers, the difference was not certain.—C. G. Browne.

2340. Hay, Edward N. Psychological evaluation of executives. *Personnel J.*, 1948, 26, 267-269.—The skilled psychologist in industry can do much

besides test applicants. For instance, he can apply the clinical method to the evaluation of executives. A psychologist, acting as a consultant in management, may be able to recommend a change of job for a "problem" executive which will be of benefit to his health, as well as increase the efficiency of the department.—M. B. Mitchell.

2341. Lézine, Irène. (*Centre National de la Recherche Scientifique, Paris.*) Enquête sur les goûts, les intérêts et les méthodes de travail des chercheurs. (Investigation on the tastes, interests, and work methods of researchers.) *Travail hum.*, 1946, 9, 87-138.—The study is a part of a larger program aiming to provide techniques for selection of young investigators in terms of aptitudes, interests, and personality. The questionnaire, patterned after Strong's vocational interest blank, containing 316 questions dealing with family background, preferred conditions of work, interest in academic subjects and extra-curricular activities, desired characteristics of collaborators, attitudes toward the concrete and the abstract, fatigue in mental work, methods of work, behavior in complex situations emerging in the course of research, definition of science, a book and a man who had exercised the greatest influence on the individual, and selection of one of 23 lectures one would like to hear. The questionnaire was administered to 70 research workers representing a large number of scientific disciplines. An attempt was made to characterize research workers with preference for direct experimentation and abstract elaboration. 23 references.—J. Brožek.

2342. Norman, Ralph D. (*Princeton U., N. J.*) A comparison of earlier and later success in naval aviation training. *J. appl. Psychol.*, 1947, 31, 511-518.—Comparison is made of the early training academic records of 200 cases each of eventual failing and successful air cadets. There were significant differences between the 2 groups on the following criteria: (1) individual courses failed, (2) total number of courses failed, (3) appearing before advisory board for academic difficulty, (4) course grades, and (5) course averages. Therefore, the general policy of discouraging retention of the weak student early in flight training is recommended.—C. G. Browne.

2343. Overholt, John A. Appraising employee performance. *Publ. Personnel Rev.*, 1948, 9, 18-21.—Merit, or efficiency, ratings should compare an employee with a standard of performance. Determining those standards is a management problem. The employee should know what he is to do and how well he is expected to do it. This standard should be applied first in daily working operations, and then in making ratings. Management itself should have a set of standards of performance for its own work. This should be a goal, not a minimum acceptable performance.—H. F. Rothe.

2344. Pacaud, S. (*Laboratoires de Psychotechnique de la S.N.C.F., Paris.*) Recherches sur la sélection professionnelle des opératrices de machines à perforer et de machines comptables. (Investiga-

tions on occupational selection of the operators of punch-card and computational machines.) *Travail hum.*, 1946, 9, 74-86.—The validity of a new test battery was determined by testing a group of 19 older and 36 younger punch-card operators, employed on the job for an average of 15.5 and 1.1 years, respectively, and engaged in a highly standardized type of work. The criteria of job success were concerned both with the speed (number of perforations per hour, the number of cards processed) and the accuracy of work (% of errors and of spoiled cards). Mental tests, including reasoning, comprehension of directions, various tests of memory, crossing-out tests, and some of the neuro-muscular tests, such as tests of coordination and speed of simple movements, had no predictive value. Tests which showed statistically significant correlations with job performance included perceptual speed, such as making entries in a 2-way table; precision of simple movements; and speed and regularity of simple reaction times. The coefficients of correlation had values from 0.30 to 0.51.—*J. Brožek.*

2345. Pacaud, S. (*Laboratoires de Psychotechnique de la S.N.C.F., Paris.*) *Recherches sur la sélection psychotechnique des agents de gare dits "facteurs-enregistrants."* (Investigations on the psychotechnic selection of railway agents in small stations.) *Travail hum.*, 1946, 9, 23-73.—The job analysis revealed a great variety of operations the agents have to perform. These are concerned with traffic safety, service to passengers, care of baggage, and bookkeeping. In the list of 10 aptitudes required by the job the top place was assigned to the capacity for carrying out varied operations according to their priority. A test designed to assay this aptitude consisted in a series of tasks (such as reaction to visual and auditory stimuli, classification of geometrical forms, entering numbers in a ledger, and punching holes in a band of paper moved to exact position by the left hand). Some of the tasks had to be interrupted if tasks of a higher priority were presented. The total score for the battery as a whole discriminated well a group of 50 "satisfactory" from 50 "less satisfactory" employees, with a coefficient of biserial correlation of 0.70. In another sample the biserial $r = 0.69$.—*J. Brožek.*

2346. Wilder, Janet Rogers, & Riggs, Lawrence. (*Willamette U., Salem, Ore.*) *Employers' attitudes toward college graduates.* *Occupations*, 1948, 26, 235-239.—24 managers of business or industrial concerns were personally interviewed to determine their attitudes toward college graduates as prospective employees. The results indicate that college training is not a requirement, but is generally an advantage. The type of work largely determines the importance of college training. Personal characteristics are stressed as of importance.—*G. S. Speer.*

2347. Williams, Stanley B. (*Johns Hopkins U. Baltimore, Md.*), & Leavitt, Harold J. *Group opinion as a predictor of military leadership.* *J. consult. Psychol.*, 1947, 11, 283-291.—This paper presents the results of some observations on the selection and

performance of junior officers in the Marine Corps. Major results are based on 100 cases. Sociometric group opinion was a more valid predictor both of success in Officer Candidate School and of combat performance than several objective tests (intelligence, two personal inventories, and Army Mechanical Aptitude Test). Reasons for the relative superiority of group opinion are discussed.—*S. G. Dulsky.*

[See also abstracts 1934, 1935, 1938, 1939, 1944, 1952.]

LABOR-MANAGEMENT RELATIONS

2348. Australia. Department of Labour and National Service. *Profit-sharing; a study of the results of overseas experience.* Melbourne, 1947. 30 p.—This monograph is a summary and evaluation of profit sharing, principally in the British dominion and in the United States. Purposes, practices, provisions, and results are discussed. Experiences are in the main unfavorable: few companies have kept it up, and earnings are not large enough to sustain motivation or improve labor relations.—*R. W. Husband.*

2349. Bardach, Felix. *Evaluating the man.* *Mod. Mgmt.*, 1948, 13(1), 14-15; 3 3.—A Weighted Point method of merit rating for employees, especially in smaller businesses, is described. Purposes are decision whether to give raise in wages, and how much. Point ranges separate employees into 6 groups, the top 3 being given increases, and the lowest watched for possible separation. Ten typical questions and answers about merit rating are presented.—*R. W. Husband.*

2350. Bourke, Walter C. *Notes on wage incentive plans.* *Mfg & Mgmt.*, 1947, 1, 274-277.—Wage incentive plans should be carefully considered in detail before they are adopted. The objects of such plans and points which require attention are outlined. The writer stresses the value of fair and accurate standards and states that these can be achieved only by detailed time studies. Included is an example of a wage incentive scheme, also a point system for calculating bonus rates for employees not directly concerned with production. The advantages of group incentives and the importance of quality standards are discussed.—(Courtesy of *Bull. industr. Psychol. Personnel Pract.*, Melbourne.)

2351. Brodman, Keeve. (*Cornell U., Med. Sch., New York.*) *Men at work; the supervisor and his people.* Chicago: Cloud, 1947. 191 p. \$2.50.—This publication is based upon work done as part of the Cornell-Caterpillar Program at the Caterpillar Tractor Co., Peoria, Illinois, under the direction of a group of physicians from Cornell University and the company. According to the author two of the basic human needs—work and belief in one's fellows—have not been satisfied in modern industrial life. Joe, a foreman, recounts—in simple, straightforward shop language—episodes of various types of worker problems and how he found simple solutions to them

by sympathetic study and understanding of the individual and his personal problems. Workers involved include the complainer, the shirker, the fighter, the grouch, the worrier, and the accident prone. The medical department plays a major part in the solutions, but occasionally the personnel department is called upon.—C. G. Browne.

2352. Chamberlain, Neil W. (Yale U., New Haven, Conn.) **The union challenge to management control.** New York: Harper, 1948. x, 338 p. \$4.50.—This is the first of a series to be issued by the Labor and Management Center at Yale. Its purpose is to discuss the demands and actual gains by labor into what heretofore have been considered management's prerogatives. Principal topics are the nature of management, nature and degree of union penetration into management, legal perspectives of rights of each party, and the need for functional integration. Four appendices deal with samples of union penetration into managerial areas in these industries: automobile, steel, meat-packing, and public utilities.—R. W. Husband.

2353. Delaney, D. M. (Lancashire House, Melbourne, Australia.) **A group personnel and welfare service.** *Bull. industr. Psychol. Personnel Pract.*, Melbourne, 1947, 3(2), 3-13.—A group of 13 small firms engaged in clothing manufacture and representing 75% of the employees in Lancashire House, participate in a group welfare or personnel scheme under the direction of a single welfare officer. In addition to social and recreational activities, the welfare officer also handles recruitment of labour, absenteeism, and labor turnover problems with evident success, although no data are given. Difficulties of the arrangement are discussed.—C. G. Browne.

2354. Jackson, W. C. (J. D. Adams Mfg. Co., Indianapolis, Ind.) **Survey of personnel department costs.** *Personnel J.*, 1948, 26, 244-247.—Thirty manufacturing, service, and retail companies around Indianapolis made estimates of costs for various personnel functions including employment, wage and salary administration, recreation, employee welfare, training, safety, medical and first aid, labor relations, cafeteria, and house organ. Some costs vary with the type of business. For instance, the companies whose employees deal with the public spend much more money on training than do manufacturing companies. On the other hand, the House Organ costs per employee are approximately the same regardless of the type of business.—M. B. Mitchell.

2355. Katz, Daniel (U. Michigan, Ann Arbor.), & Hyman, Herbert. **Industrial morale and public opinion methods.** *Int. J. Opin. Attitude Res.*, 1947, 1(3), 13-30.—To illustrate the use of sampling and interviewing techniques in social science, the authors describe 2 war-time surveys of industrial morale. In a study of absenteeism, samples of 100 workers were drawn at random from each of 18 war plants representing 6 industries. Interview data from the workers, absenteeism records, and information about

plant and community conditions were analyzed along with intensive interview data from the last 80 absentees from each of 2 plants. In a study of shipyard productivity, similar sampling, interviewing and community descriptive procedures were followed. Significant aspects of these procedures were the use of relevant samples, the projection of attitudes against plant and community conditions, and the variety of interviewing and fact-gathering techniques used. Results are summarized under 6 headings: (1) over-all plant rates of absenteeism were more related to inplant than to community conditions, (2) individual rates of absence were related to dissatisfaction with inplant conditions, (3) interaction of factors such as outplant and inplant conditions, (4) illness and the interaction of morale, (5) effectiveness of programs for treating absenteeism, and (6) validity of the material.—N. L. Gage.

2356. Kelly, Roy Willmarth, & Ware, Hollis F. **An experiment in group dynamics.** *Advanced Mgmt.*, 1947, 12, 116-119.—By properly inducing a control group of new employees, and by largely ignoring an equal group, it was found that nearly all of the former made satisfactory progress and remained on the job, whereas "a high percentage of those who were put to work directly without preliminary orientation training had dropped out." The induction training aims at building confidence and establishing levels of aspiration. Other group methods used were: friendly discussions among freely elected group captains of problems not necessarily related to production; leadership training by regular supervisors' meetings; role playing by representatives of labor and management interchanging positions in group meetings; and the insistence on unanimous agreement before adoption of recommendations. The program is an established part of the industrial relations program at the Harwood Manufacturing Corporation.—H. Moore.

2357. Kerr, Willard A. (Tulane U., New Orleans, La.) **Labor turnover and its correlates.** *J. appl. Psychol.*, 1947, 31, 366-371.—In an Indiana electronics factory, correlations between labor turnover rates of 7 manufacturing departments employing 3000 workers and 24 variables show coefficients significant at the 5% level for the following variables: average hourly non-overtime earnings of hourly paid males, $-.71$; monotony of average job, $.73$; promotion probability for average worker, $-.76$. In a New Jersey electronics factory, correlations between avoidable separation rate of 53 factory departments employing 10,000 workers and 40 variables show coefficients significant at the 5% level for 11 variables. Correlations range from $.47$, monotony of average job to $-.81$, average non-overtime earnings of hourly-paid males.—C. G. Browne.

2358. Peterson, Florence. (Bryn Mawr Coll., Bryn Mawr, Pa.) **Management efficiency and collective bargaining.** *Industr. labor Relat. Rev.*, 1947, 1, 29-49.—"The substitution of collective bargaining for unilateral employer control of working condi-

tions signifies the introduction of democratic procedures in industry. It also introduces additional unique problems the impact of which extend far beyond the individual business enterprise or employer (and stockholders) and workers directly involved." The character of this impact is discussed in relation to the issues of management prerogatives, determination of work rules, control over the work force, and setting of job standards and production incentives. A significant contribution towards stability in industry is seen in the drastic reduction in voluntary quit and discharge rates in the period 1938-39 over the period 1928-29. This reduction is attributed to the extension in the unionization of workers. The writer concludes that "... collective bargaining presents unique problems in the art of management, and ... different techniques are required from those prior to unionization. It is a problem which must be faced, however, for the entire history of unionism has been a step-by-step admission of workers into the area once held to be the sole prerogative of management."—P. Ash.

2359. Selekman, Benjamin M. (*Harvard U., Cambridge, Mass.*) *Labor relations and human relations*. New York: McGraw-Hill, 1947. xi, 255 p. \$3.00.—Management and union must systematically study the components for virile cooperation within industrial peace, which must be found not through legislation but through removing the basic causes of maladjustments in human relationships. These involve the fundamental psychological emotions and will yield to a clinical approach. Training of foremen and union stewards by the conference method must fit them to single out the real from the expressed reason for conflict. Circular channels of communication must be set up between the worker and all levels of leadership in both union and management. Emotionally mature leaders on both sides must be developed who recognize the intricate influences of home, community, foreign and personal affairs, and the shop on the fears and anxieties of the workers, who see the striving to get ahead by the worker as a product of American democratic action, who understand conflict and cooperation as characteristic of human relations, and who realize that the worker must be made to feel an indispensable part of his working environment and an effective part of society. Conflict must be minimized through a realization that cooperation is imposed on the worker by technology and authority, and such cooperation is best enlisted in the worker through activities leading to the achievement of personal goals, and can only be brought about when the human requirements of democracy are promoted.—J. W. Hancock.

2360. Shaw, Anne G. *Productivity; problems of incentive*. *J. Inst. Personnel Mgmt*, 1946, 37, 172-177.—This article discusses the problem of what incentives can be used to increase the output of workers in Britain, in the face of the difficulties posed by an industry urgently in need of re-equipment and an increasingly inadequate labour force. A

brief analysis is made of various solutions which have been advanced—improved factory amenities, shorter working week, shift working, mechanisation, financial incentives, and joint consultation. These do not, however, provide the answer to industry's major problem. This must be sought in a study of the nature of the satisfactions inherent in the job. The nature of the various sources of satisfaction available in any job need to be investigated, and methods developed for discriminating between individuals in relation to the satisfactions available. The contention is that by systematic study a great deal can be done to develop the "satisfaction-interest" in any job.—(Courtesy of *Bull. industr. Psychol. Personnel Pract.*, Melbourne.)

2361. Shiskin, Boris. *Job evaluation, what it is and how it works*. *Amer. Federationist*, 1947, 54, 8-9; 30-31.—Union leaders should understand and be willing to participate in such management techniques as job evaluation. Job evaluation methods, e.g., job ranking, occupational grading, point rating, and factor comparison are described. The part that union leaders should play in job evaluation and wage setting processes are discussed.—(Rewritten: courtesy *Publ. Personnel Rev.*)

2362. Sutherland, J. D. *Human motivation in industry*. *Industr. Welf. Personnel Mgmt*, 1946, 28, 192-194.—The problem of incentive in industry is one of morale in working groups rather than monetary rewards for individuals. Greater production will be achieved in proportion as "incentives" and "rewards" are forgotten, and an understanding gained of human relations inside groups and between groups. A knowledge of the industrial worker's needs is necessary to prevent frustration of these needs, and to devise means whereby they can be satisfied. Experimental work on morale in groups has shown that output is best when the major need, that of belonging to a group in which the individual feels he has a part in deciding the common destiny, is satisfied, but little benefit can be derived from this knowledge unless management is convinced about the need for democratic participation.—(Courtesy of *Bull. industr. Psychol. Personnel Pract.*, Melbourne.)

2363. Vernon, Leroy. (*Personnel Laboratory, Chicago, Ill.*) *Counseling in education and industry*. In Hamrin, S. A., & Endicott, F. S., *Improving guidance and personnel services through research*, 103-116. (see 22: 2137).—The counseling process is described as "a device for clarifying the role of each individual and enabling his comfortable acceptance of it." Relationships between counseling on the one hand, and medicine, religion, and adult education are touched upon, and the growth of counseling as a profession is described, although "there is still not enough demand to make the profession profitable on a large scale." The application of counseling to industrial problems, especially on the part of the management engineer, is described, and the author concludes that the counseling approach in interviews between outside engineering personnel and present

employees of a company will do much to reduce tensions and friction in personnel relations.—P. Ash.

[See also abstract 2204.]

INDUSTRIAL AND OTHER APPLICATIONS

2364. Longley, Alfred C. (*Command and General Staff Coll., Fort Leavenworth, Kans.*) **Why commanders should know about motivation and frustration.** *Milit. Rev., Ft Leavenworth*, 1948, 27, 31-38.—This article summarizes those aspects of motivation and frustration which Chaplain Longley considers essential for the commander of military personnel. He emphasizes especially the motivational values in effective leadership as the means of overcoming the ever-present frustrations imposed by the restrictive elements in military life. The effective commander seeks to overcome conflicts and frustrations in his men before they have become too serious or overwhelming. All commanders and subordinate staff personnel need to recognize the importance of proper motivation of personnel and the need for overcoming frustrating elements in military situations as essential to successful command.—M. A. Seidenfeld.

[See also abstracts 1972, 2065.]

INDUSTRY

2365. Gombert, William. (*International Ladies' Garment Worker's Union, New York.*) **Measuring the fatigue factor.** *Industr. labor Relat. Rev.*, 1947, 1, 80-93.—The problem of the relationship of industrial fatigue to time study is reviewed from the point of view that it has been an "implicit assumption [of such study] that an adequate measure of fatigue could be found in the measure of output." A large number of industrial engineers and psychologists who defined fatigue in these terms are cited to indicate "the utter confusion to which the output index of fatigue leads." This confusion is brought out by contrasting the work done by the physiologists on the one hand and the industrial psychologists on the other. The approach to the fatigue problem developed by Hoagland and Pincus, in which direct physiological tax was measured by the excretion of breakdown products of the adrenal cortex (the 17-keto steroids), is described, and its implications for the measurement of industrial fatigue are discussed. The writer concludes that, while now "we have no way of knowing exactly how the physiological effects of work affect the requirements of a sound production standard . . . once we have developed an objective measure of physiological tax, then a great many other problems will open up in terms of the long-run effects of work upon the man in the man-machine system."—P. Ash.

2366. Goodlaw, Edward. (219 W. 7th St., Los Angeles, Calif.) **A program for optometry in industry.** *Optom. Wkly*, 1947, 38, 1355-1359; 1387-1390.—A survey procedure for detecting visual defects in groups of employees is outlined with recommendations for optometric studies in industry.—D. Shaad.

2367. Guilford, J. P. (*U. Southern California, Los Angeles.*) **Some lessons from aviation psychology.** *Amer. Psychologist*, 1948, 3, 3-11.—Guilford presents comments and observations based upon his experience with the psychological services of the Army Air Forces. He stresses the necessity of detailed and ready knowledge of facts and principles; the psychologist should not rely upon references, etc. Also, it is important that he keep the individuals to whom he is responsible informed of his work and results, in a manner which can be understood by those who are not psychologists. Another point is that the psychologist must give more consideration to low correlations; they are practically useful when large numbers of individuals are involved. With regard to factor analysis Guilford observes that the traditional psychological categories were found inadequate to describe individuals. Through factor analysis, 27 factors were derived which were more adequate. Factorial theory and methods as used here appear to be a basic procedure in vocational psychology. As for the new factors, Guilford discusses many of them briefly. Another observation is that especial difficulty was encountered in assessing temperamental and dynamic traits which were found to be important for performance of duty and for avoidance of maladjustments.—L. J. Timm.

2368. Horn, Daniel. **A study of pilots with repeated aircraft accidents.** *J. Aviat. Med.*, 1947, 18, 440-449.—This study analyzes the records of more than 10,000 pilots who have had 2 or more aircraft accidents. The data show that a pilot is much more likely to have another accident within 30 days after his first one. The probability that a pilot will have another accident decreases markedly as time elapses. The same phenomenon holds for later accidents, except the later accidents occur even closer together than do the first 2. The author believes that these findings cannot be explained entirely by hypotheses about poor pilot material or accident-proneness. He feels that the explanation may lie in the disruptive effect of an accident on the pilot's proficiency. As time goes on, the pilot regains his confidence and poise in the air and so is less likely to have another accident. Confirmation of the author's hypothesis comes from the fact that the same trends apply to pilots who were involved in accidents which could clearly not be ascribed to pilot-error. If this analysis is correct, it implies that serious consideration should be given to the readjustment of a pilot immediately following an accident.—A. Chapanis.

2369. Lawshe, C. H., Jr., & Wilson, R. F. (*Purdue U., Lafayette, Ind.*) **Studies in job evaluation. 6. The reliability of two point rating systems.** *J. appl. Psychol.*, 1947, 31, 355-365.—Factor analysis studies have shown that job evaluations with a few ratings correlate highly with evaluations made with lengthy rating systems. To test the reliability of the abbreviated scales, 10 men rated 20 jobs using the NEMA system of point ratings on 11 scales, and 10 other men rated 20 jobs using a simplified plan of

4 items—general schooling, learning period, surrounding conditions, and job hazards. In all results, the simplified system proved to be more reliable than the NEMA plan. 10 references.—C. G. Browne.

2370. Linton, John. Applied motion study. *Mfg & Mgmt*, 1947, 1, 327-335.—How increased efficiency by means of motion study has been achieved in a large assembly plant in Sydney is described in this article. The principles of motion study, the definition and explanation of the basic divisions of accomplishment, and the use of a motion study laboratory and of films as aids to training are discussed. It is claimed that the application of motion study resulted in an increase in production varying from 20 to 300%, and also that employees are appreciative both of enhanced earnings and easier work methods.—(Courtesy of *Bull. industr. Psychol. Personnel Pract.*, Melbourne.)

2371. Robertson, J. G. Working parties in British industries. *Bull. industr. Psychol. Personnel Pract.*, Melbourne, 1947, 3(2), 28-38.—In 1945, the British Government appointed "Working Parties" representative of employers, workers, and the general public "to examine and enquire into the various schemes and suggestions put forward for improvements of organisation, production, and distribution methods and processes in the industry, and to report as to the steps which should be taken in the national interest to strengthen the industry and render it more capable of meeting competition in the home and foreign markets." Industries outside the field of nationalization were studied. Reports on various industries emphasize such needs as development of an efficient labor force, attractive work conditions, high quality of management, uniform methods of cost accounting, economical marketing and distribution, and particularly more effective application of research knowledge to various aspects of industrial practice.—C. G. Browne.

2372. Sandberg, K. O. William, & Lipschultz, Harold L. How long a reach? *Mod. Mgmt*, 1948, 13(1), 7-8.—In vertical work, such as switchboards or instrument panels, it was found that seated or standing male operators cannot efficiently exceed a twenty inch working area for each arm.—R. W. Husband.

2373. Schrenk, Louis B. Effect of light changes on traffic accidents shown in Detroit lighting report. *Illum. Engng*, 1947, 42, 890-892.—An analysis of 386 traffic accidents indicates that the single factor of visibility was responsible for 71 or 18.5%. The analysis was made by comparing accident ratios per traffic at equal numerical times during standard and daylight saving time. Daylight saving time showed more accidents in the morning than did standard time, but the latter showed more evening accidents.—G. W. Knox.

2374. Wirt, S. Edgar. (Purdue U., Lafayette, Ind.) Occupational vision. *Optom. Wkly*, 1947, 38, 1140-1143; 1185-1188; 1224-1227; 1265-1267; 1299-1302; 1325-1328; 1360-1362.—Development of suitable eye survey tests for specific occupational re-

quirements is described, with detailed information concerning their application to several types of work.—D. Shaad.

[See also abstracts 1994, 2021.]

BUSINESS & COMMERCE

2375. Asher, E. J., & Kahn, David. (Purdue U., Lafayette, Ind.) The effect of "look" and "read" directions upon the attention value of illustrations and texts in magazine advertisements. *J. appl. Psychol.*, 1947, 31, 431-436.—Using 12 full-page magazine advertisements, 2 groups of college students were instructed either to "read" or "look" at the ads. The Purdue Eye-Camera measured the number of fixations and the time spent on each ad. The group receiving "look" directions spent more time on the illustrations, while those receiving the "read" directions spent more time on the texts, but none of the differences proved to be statistically significant.—C. G. Browne.

2376. Crespi, Leo P. (Princeton U., N. J.) The implications of tipping in America. *Publ. Opin. Quart.*, 1947, 11, 424-435.—Poll results are presented and discussed, demonstrating the value of the survey method in studying institutional behavior. Most people approve of tipping "by and large" but only because wages are inadequate for certain service workers. The custom itself is disliked. People tip because of social pressure, and not because of any incentive or ego value. Most urbanites tip frequently, widely, substantially, and unwillingly. They do not consider tipping undemocratic, but would rather have a service charge included in the bill. The writer suggests a plan (an anti-tipping league with a card to be left instead of a tip) towards ending the custom.—H. F. Rothe.

2377. Hyman, Herbert H., & Sheatsley, Paul B. Some reasons why information campaigns fail. *Publ. Opin. Quart.*, 1947, 11, 412-423.—Five psychological barriers to the free flow of ideas are described, with accompanying illustrative data from the N.O.R.C. The 5 reasons are: there exists a hard core of chronic know-nothings (i.e., there is something about the uninformed that makes them hard to reach on any topic); interested people acquire the most information; people seek information congenial to their prior attitudes; people interpret the same information differently; and information does not necessarily change attitudes. The data and findings discussed show that merely "increasing the flow" of information does not increase the effectiveness of an information campaign.—H. F. Rothe.

2378. Katona, George. (U. Michigan. Ann Arbor.) Contribution of psychological data to economic analysis. *J. Amer. statist. Ass.*, 1947, 42, 449-459.—A theory of economic psychology is presented emphasizing the importance of, micro-economic data, the concepts of expectation and anticipation, and the motivation and attitudes of the individual economic units. Applications of the sample interview survey technique of Likert to economic an-

alysis and prediction are emphasized and specific examples discussed.—*J. W. Degan.*

2379. Kercher, Leonard C. (*Western Michigan Coll. Educ., Kalamazoo.*) **Social problems on the air: an audience study.** *Publ. Opin. Quart.*, 1947, 11, 402-411.—A survey was made of the effectiveness of two documentary radio programs upon samples of several groups of persons in the area of Kalamazoo, Michigan. Of all persons studied about 16% heard the first broadcast, 10% heard the second, and 4.5% heard both. One third of the listeners had tuned in intentionally, while 3 out of 4 persons in the entire sample had not heard of the broadcasts. A higher level of listening occurred among the upper socioeconomic groups. The 5 sub-samples ranked as follows in the extent of their listening: students, college faculty, service clubs, farmers, and organized labor. Results are presented and discussed.—*H. F. Rothe.*

2380. Lostutter, Melvin. (*Michigan State Coll., E. Lansing.*) **Some critical factors of newspaper readability.** *Journalism Quart.*, 1947, 24, 307-314; 331.—Applying the Flesch and Lorge formulae to 150 articles from a typical medium sized daily newspaper the author concludes that more measurement of the readability of newspapers is needed, both as a preliminary to campaigns for improvement and as a check on the results of such campaigns. Shorter words and sentences made for increased comprehension. The Flesch formula is best adapted to the measurement of newspaper material but more study is needed of the effects of personal names on newspaper readability. Attainment of readability for the newspaper as a whole is a conscious process somewhat independent of the education and experience of the paper's staff writers. 32-item bibliography.—*V. Goertzel.*

2381. Mergenthaler Linotype Company. **The readability of type.** Brooklyn, N. Y.: Mergenthaler Linotype Company, 1947. 67 p.—The readability of type depends in some measure on the nature of the type face and on the way it is set on the page. Certain problems concerning readability of various type faces from the point of view of the typographer are discussed in this booklet. Typographic readability in newspapers, magazines, and books is separately discussed.—*C. M. Louttit.*

2382. Mergenthaler Linotype Company. **Researches in readability.** Brooklyn, N. Y.: Mergenthaler Linotype Company, 1947. 31 p.—This brochure discusses the methods of investigating readability of type faces. The experimental data presented are summarized in large measure from Luckiesh and Moss. (see 17: 962)—*C. M. Louttit.*

2383. Schramm, Wilbur. (*U. Illinois, Urbana.*) **Measuring another dimension of newspaper readership.** *Journalism Quart.*, 1947, 24, 293-306.—"How much of the story does the reader read?" is the question this study attempts to answer. 600 interviews divided into 3 matched samples—a small

weekly, a small daily, and a large city daily—were conducted. The study suggests that (1) a news story loses readers rapidly in the first few paragraphs. Thereafter, the curve of loss flattens out. (2) The smaller a paper and the less its frequency, the more likely it is to hold readers. (3) The average individual reads between a third and a tenth of the total content of a paper. (4) High initial readership is no guarantee that readers will stay longer with the story. (5) A feature type story holds readers better than a straight news type of story. (6) Skipping a story to another page is not so bad for readership as has commonly been supposed. Results are presented in some detail with 11 tables and 4 charts.—*V. Goertzel.*

PROFESSIONS

2384. Berg, Irwin August. (*U. Illinois, Urbana.*) **A study of success and failure among student nurses.** *J. appl. Psychol.*, 1947, 31, 389-396.—110 student nurses were administered a test battery consisting of the ACE, George Washington University Series of nursing tests, Kuder Preference Record, and Harrower-Erickson Multiple Choice Test. About one-half of the eventual poor scholastic group could have been eliminated because of low test performance. Those nurses who quit training show few significant variabilities in test performance from those who remained in training. It is concluded that admission standards to nurses' training must be lowered or the physical demands and routine tasks imposed on nurses changed if the number of graduate nurses is not to decrease. 28 references.—*C. G. Browne.*

2385. Sherfey, Mary J. (*New York Hosp., New York.*) **Psychiatry belongs at the bedside.** *Amer. J. Nurs.*, 1947, 47, 683-685.—The understanding of the influence of emotions on symptoms and behavior is essential to good nursing practice. The nurse should know that all abnormal behavior and emotion disturbances have a real cause and that the ultimate motivation for all such deviations is fear. Nurses should learn to recognize emotional symptoms and should learn how to apply the basic principles of psychotherapy in their routine contacts with patients.—*F. Gehlmann.*

2386. Wendstrand, John F. **Some uses of time study as an administrative tool.** *Publ. Welfare*, 1947, 5, 229-230; 240.—A time study of the routing of cases through the various channels in the Nebraska Department of Assistance and Child Welfare is described. Each document was followed from its receipt until action was taken. The results showed certain peak periods each day, in the late morning and mid-afternoon. The results indicated certain patterns of time usage as related to case planning, field work, and recording. The results were useful in agency administrative planning.—(Rewritten: courtesy of *Publ. Personnel Rev.*)

[See also abstract 2138.]

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